



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

AVERY DAY
ACTING COMMISSIONER

September 14, 2015

Ms. Ellen L. Rossi
Jasper Wyman & Sons Inc.
P.O. Box 100
Milbridge, ME. 04658
elrossi@wymans.com

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0037265
Maine Waste Discharge License (WDL) Application #W008084-5C-C-R
Proposed Permit

Dear Ms. Rossi:

Enclosed is a **proposed draft** MEPDES permit and Maine WDL (permit hereinafter) which the Department proposes to issue as a final document after opportunity for your review and comment. By transmittal of this letter you are provided with an opportunity to comment on the proposed draft permit and its conditions (special conditions specific to this permit are enclosed; standard conditions applicable to all permits are available upon request). If it contains errors or does not accurately reflect present or proposed conditions, please respond to this Department so that changes can be considered.

By copy of this letter, the Department is requesting comments on the proposed draft permit from various state and federal agencies, as required by our new regulations, and from any other parties who have notified the Department of their interest in this matter.

All comments must be received in the Department of Environmental Protection office on or before the close of business **Thursday, October 15, 2015**. Failure to submit comments in a timely fashion will result in the final document being issued as drafted. Comments in writing should be submitted to my attention at the following address:

Maine Department of Environmental Protection
Bureau of Land & Water Quality
Division of Water Quality Management
17 State House Station
Augusta, ME 04333

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-3901 FAX: (207) 287-3435

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

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6305

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 760-3143

If you have any questions regarding the matter, please feel free to call me at 485-2404.

Sincerely,

A handwritten signature in cursive script, appearing to read "Irene Saumur".

Irene Saumur
Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management

Enc.

cc: William Johnson, DEP/CMRO
Sandy Mojica, USEPA



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

DEPARTMENT ORDER

IN THE MATTER OF

JASPER WYMAN & SONS INC.)	MAINE POLLUTANT DISCHARGE
CHERRYFIELD, WASHINGTON COUNTY)	ELIMINATION SYSTEM PERMIT
OVERBOARD DISCHARGE)	AND
ME0037265)	WASTE DISCHARGE LICENSE
W008084-5C-C-R)	RENEWAL
APPROVAL)	

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

APPLICATION SUMMARY

The permittee has submitted a timely and complete application to the Department for the renewal of Maine Waste Discharge License (WDL) W008084-5C-B-R, which was issued by the Department on October 4, 2010, and is due to expire on October 4, 2015. The permit authorized the daily maximum year-round discharge of up to 3,000 gallons per day (gpd) of secondary treated sanitary waste water from a food processing facility to the Narraguagus River, Class SB, in Cherryfield, Maine.

PERMIT SUMMARY

The licensee has not requested any modifications to the permitting action. This permitting action is carrying forward all the terms and conditions of the 10/4/10 WDL except;

1. This permitting action is establishing a requirement to sample pH once per year.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated September 14, 2015, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with State law.
3. The provisions of the State's antidegradation policy, 38 M.R.S.A. §464(4)(F), will be met, in that:
 - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
 - (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in Maine law, 38 M.R.S.A., §414-A(1)(D).
5. The overboard discharge system was in continuing existence for the 12 months preceding June 1, 1987.
6. A subsurface wastewater disposal system could not be installed in compliance with the Maine Subsurface Waste Water Disposal Rules at the time the renewal application was accepted by the Department.
7. A publicly owned sewer line is not located on or abutting land owned or controlled by the permittee or is not available for the permittee's use.
8. The discharge is not located within the boundaries of a sanitary district or sewer district.

ACTION

THEREFORE, the Department APPROVES the above noted application of JASPER WYMAN & SONS INC. to discharge a daily maximum flow of up to 3,000 gallons per day (gpd) of secondary treated sanitary waste water from a food processing facility to the Narragagus River, Class SB, in Cherryfield, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. *“Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits,”* revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit becomes effective upon signature and expires at midnight five (5) years from the date of signature below.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

DONE AND DATED AT AUGUSTA, MAINE THIS ____ DAY OF _____ 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
For Avery T. Day, ACTING COMMISSIONER

Date of initial receipt of application: August 31, 2015
Date of application acceptance: September 1, 2015

Date file with the Board of Environmental Protection _____

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- Beginning the effective date of this permit, the permittee is authorized to discharge secondary treated sanitary wastewater from **Outfall #002B** to the Narraguagus River. Such discharges shall be limited and monitored by the permittee as specified below⁽¹⁾:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [50050]	---	---	3,000 gpd [07]	---	---	---	Continuous [99/99]	Metered [MT]
BOD₅ [00310]	1.0 lbs/day [26]	1.1 lbs/day [26]	1.2 bs/day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	1/Month [01/30]	Grab [GR]
BOD₅ Percent Removal⁽²⁾ [81010]	---	---	---	85% [23]	---	---	1/Month [1/30]	Calculate [CA]
TSS [00530]	1.0 lbs/day [26]	1.1 lbs/day [26]	1.2 bs/day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	1/Month [01/30]	Grab [GR]
TSS Percent Removal⁽²⁾ [81011]	---	---	---	85% [23]	---	---	1/Month [1/30]	Calculate [CA]
Settleable Solids [00545]	---	---	---	---	---	0.3 ml/L [25]	1/Month [01/30]	Grab [GR]
Fecal Coliform Bacteria⁽³⁾ [31616] (May 15 – September 30)	---	---	---	15/100 ml ⁽⁴⁾ [13]	---	50/100 ml [13]	2/Month [02/30]	Grab [GR]
Total Residual Chlorine⁽⁵⁾ [50060]	---	---	---	Report mg/L [19]	---	1.0 mg/L [19]	2/Week [02/07]	Grab [GR]
pH [00400]	---	---	---	---	---	6.0 – 9.0 SU [12]	1/Year [1/YR]	Grab [GR]

Footnotes: See Page 6 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes:

1. **Sampling** - All effluent monitoring shall be conducted at a location following the last treatment unit in the treatment process as to be representative of end-of-pipe effluent characteristics. Sampling and analysis must be conducted in accordance with; a) methods approved in 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Human Services. Samples that are sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 or laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000).
2. **Percent Removal** – The treatment facility shall maintain a minimum of 85 percent removal of both BOD₅ and TSS for all flows receiving secondary treatment. The percent removal shall be calculated based on an assumed influent concentration of 286 mg/L and measured effluent concentration values.
3. **Bacteria Limits** – Fecal coliform bacteria limits and monitoring requirements are seasonal and apply between May 15 and September 30 of each year. The Department reserves the right to require disinfection on a year-round basis to protect the health and welfare of the public.
4. **Bacteria Reporting** – The monthly average fecal coliform bacteria limitation is a geometric mean limitation and sample results shall be reported as such.
5. **TRC Monitoring** – Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine based compounds are being used to disinfect the discharge. The permittee shall utilize approved test methods that are capable of bracketing the TRC limitation in this permit.

B. ANNUAL DISCHARGE FEES

Pursuant to Maine law, 38 M.R.S.A. §353-B, the permittee is required to pay an applicable annual fee for discharges authorized by this permit. Failure to pay an annual fee within 30 days of the anniversary date of a license/permit is sufficient grounds for revocation of the license, permit or privilege under Maine law, 38 M.R.S.A. §341-D, subsection 3.

SPECIAL CONDITIONS

C. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time which would impair the uses 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 discharges 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.

D. TREATMENT PLANT OPERATOR

The person who has the management responsibility over the treatment facility must hold a **Grade I** certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Sewerage Treatment Operators*, Title 32 M.R.S.A., Sections 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). 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. AUTHORIZED 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 1, 2015; 2) the terms and conditions of this permit; and 3) only from Outfall #002B. Discharges of waste water from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit.

F. NOTIFICATION REQUIREMENT

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

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

SPECIAL CONDITIONS

G. OPERATION & MAINTENANCE (O&M) PLAN

The permittee shall maintain 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.

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

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

H. SITE EVALUATION FOR TRANSFERRED AND RENEWED PERMITS

The Department may not grant approval for a **permit transfer** if a site evaluation concludes that a non-discharging wastewater disposal system designed in compliance with the Maine Subsurface Waste Water Disposal Rules administered by the Maine Department of Health and Human Services, Division of Environmental Health can be installed as a replacement system for the overboard discharge.

The Department may not grant approval for a **permit renewal** if the site evaluation concludes that a non-discharging wastewater disposal system can be installed as a replacement system for the overboard discharge and the Department has offered the permittee funding for the removal of the discharge.

I. MONITORING AND REPORTING

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

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

SPECIAL CONDITIONS

I. MONITORING AND REPORTING (cont'd)

Alternatively, if you are submitting an electronic DMR (eDMR), the completed eDMR must be electronically submitted to the Department by a facility authorized DMR Signatory not later than close of business on the 15th day of the month following the completed reporting period. Hard Copy documentation submitted in support of the eDMR must be postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that it is received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period. Electronic documentation in support of the eDMR must be submitted not later than close of business on the 15th day of the month following the completed reporting period.

J. REOPENING OF PERMIT FOR MODIFICATIONS

Upon evaluation of the tests results or monitoring requirements specified in Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at any time and with notice to the permittee, modify this permit to: (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded; (2) require additional effluent or ambient water quality monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

K. 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.

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

PROPOSED DRAFT FACT SHEET

Date: **September 14, 2015**

MEPDES PERMIT: **ME0037265**
WASTE DISCHARGE LICENSE: **W008084-5C-C-R**

NAME AND ADDRESS OF APPLICANT:

**JASPER WYMAN & SONS IINC.
P.O. Box 100
Cherryfield, ME. 04658**

COUNTY: **Washington**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**178 Main Street
Cherryfield, ME. 04658**

RECEIVING WATER / CLASSIFICATION: **Narraguagus River / Class SB**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Ms. Ellen L. Rossi
Operations Manager
(207) 546-3381
e-mail: elrossi@wymans.com**

1. APPLICATION SUMMARY

Jasper Wyman & Son Inc. (JWS/permittee hereinafter) has submitted a timely and complete application to the Department for renewal of Maine Waste Discharge License (WDL) W008084-5C-B-R, which was issued by the Department on October 4, 2010 and is due to expire on October 4, 2015. The permit authorized the daily maximum year-round discharge of up to 3,000 gallons per day (gpd) of secondary treated sanitary waste water from a food processing facility to the Narraguagus River, Class SB, in Cherryfield, Maine. See **Attachment A** of this Fact Sheet for a location map.

2. PERMIT SUMMARY

- a. Terms and conditions: The licensee has not requested any modifications to the permitting action. This permitting action is carrying forward all the terms and conditions of the 10/4/10 WDL.
- b. Facility History: This section provides a summary of significant licensing/permitting actions, as well as other significant milestones that have been completed.

March 17, 1987 – The Department issued WDL #W000645-42-A-R for a five-year term.

September 7, 1993 – The Department issued WDL #W000645-WA-D-R for a five year term.

August 28, 2000 - The Department issued WDL #W008084-5C-A-R for a ten-year term. It is noted a new WDL number was assigned to the sanitary waste water discharge as the discharge of blueberry process waste water remains regulated via WDL #W000645.

August 2, 2010 – The Department accepted the permittee’s General Application for renewal of WDL #W008084-5C-A-R. The application was assigned WDL #5C-B-R

October 4, 2010 – The Department issued WDL #W008084-5C-B-R/MEPDES #ME0037265 for a five year term.

September 1, 2015 – The Department accepted the permittee’s General Application for renewal of WDL #W008084-5C-B-R. The application was assigned WDL #W008084-5C-C-R

- c. Source Description: The discharge is sanitary wastewater from a blueberry processing facility. The processing facility building has nine toilets and eight sinks, with a maximum number of 150 employees per day during August, the busiest month. Wastewater volume is calculated by totaling the readings of the flow meters located on each of the domestic water lines serving the facility’s restrooms. The discharge occurs for more than six months of the year.
- d. Waste Water Treatment: The waste water currently receives a secondary level of treatment from an overboard discharge system consisting of a 3,000 gallon septic tank and a 35' X 75' sand filter, with chlorine disinfection. The treated waste water is collected in a vault where it is pumped to the wastewater lagoon or discharged into the receiving waterbody via an outfall pipe measuring four (4) inches in diameter which extends out into the receiving water at or just short of the center of the channel.

3. CONDITIONS OF PERMIT

Maine law, 38 M.R.S.A. §414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with 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. §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. §469 classifies all estuarine and marine waters lying within the boundaries of the State and which are not otherwise classified as Class SB, which includes the tidewaters of the Narraguagus River. Maine law, 38 M.R.S.A. §465-B(2) describes the standards for Class SB waters. The standards for Class SB waters are as follows;

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

The dissolved oxygen content of Class SB waters must be not less than 85% 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 8 per 100 milliliters or an instantaneous level of 54 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures. 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, United States Food and Drug Administration.

Discharges to Class SB waters may not cause adverse impact to estuarine and marine life in that the receiving waters must be of sufficient quality to support all estuarine and marine species indigenous to the receiving water without detrimental changes in the resident biological community. There may be no new discharge to Class SB waters that would cause closure of open shellfish areas by the Department of Marine Resources. For the purpose of allowing the discharge of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety, the department may find that the discharged effluent will not cause adverse impact to estuarine and marine life as long as the materials and methods used provide protection for nontarget species. When the department issues a license for the discharge of aquatic pesticides authorized under this paragraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2012 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, lists the segment of the Narraguagus River in the vicinity of the JWS discharge in several categories indicating impairment of water quality standards. The categories are as follows:

Category 4-A: Estuarine and Marine Waters with Impaired Use, TMDL completed. The table lists Waterbody ID 705-1, DMR Area #53, Narraguagus River, Milbridge, 821 acres, Class SB as being prohibited from the harvesting of shellfish due to elevated bacteria levels caused by overboard discharges and non-point sources. See **Attachment B** of this Fact Sheet for a map delineating DMR Area #53.

Category 5-D: Estuarine and Marine Waters Impaired by Legacy Pollutants states all marine and estuarine waters are listed in Category 5-D, partially supporting fish (fish and shellfish consumption) due to elevated levels of PCB's, and other persistent, bioaccumulating substances in lobster tomally.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The Maine Department of Marine Resources (DMR) assesses information on shellfish growing areas to ensure that shellfish harvested are safe for consumption. The Maine Department of Marine Resources has authority to close shellfish harvesting areas wherever there is a pollution source, a potential pollution threat, or poor water quality. The DMR traditionally closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (in-stream thresholds established in the National Shellfish Sanitation Program) or maintains shellfish harvesting closure areas due to lack of updated information regarding ambient water quality conditions. In addition, the DMR prohibits shellfish harvesting in the immediate vicinity of all wastewater treatment outfall pipes as a precautionary measure in the event of a failure in the treatment plant's disinfection system. Thus, shellfish harvesting Area #53 is closed to the harvesting of shellfish due to insufficient or limited ambient water quality data to determine that the area meets the standards in the National Shellfish Sanitation Program. The shellfish closure area is identified on the map included as Fact Sheet **Attachment B**. The Department is making the determination that compliance with the fecal coliform bacteria and other secondary wastewater treatment limits established in this permitting action ensure that the discharge of secondary treated wastewater from the JWS facility will not cause or contribute to the failure of the receiving waters to meet the standards of its designated classification.

The 2012 305(b) report also lists all estuarine and marine waters in a category entitled, *Category 5-D: Estuarine and Marine Waters Impaired by Legacy Pollutants*. The waters are listed as partially supporting fishing (shellfish consumption) due to elevated levels of PCBs and other persistent, bioaccumulating substances in lobster tomally. 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. However, Section 1(A)(1) of the Chapter 519 rule states in part:

“This rule applies to all persons licensed or permitted pursuant to 38 MRSA §413 to discharge pollutants to the surface waters of the State except as described below. For the purposes of this rule, the term licensee also means permittee.

Categorical exclusions. This rule does not apply to the following categories of licensees: combined sewer overflows, snow dumps, pesticide applications, and over board discharges licensed pursuant to 38 MRSA §413.[emphasis added] Except, however, specific members of these categories may be required by the department to comply with this rule on a case by case basis...”

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Best Practicable Treatment (BPT) - Overboard discharges may be permitted only where no technologically proven alternative exists. Overboard discharge treatment systems must be capable of meeting secondary treatment standards as described in 06-096 CMR Chapter 525, Section 3 and Chapter 596 section 9, unless the Department finds that alternate limits are appropriate. After accepting a renewal application as complete for processing, the Department shall approve an overboard waste discharge license only if all of the following criteria are met.

- (1) A publicly owned sewer line is not located on or abutting land owned or controlled by the applicant or is not available for the applicant's use.

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

- (2) A subsurface wastewater disposal system cannot be installed in compliance with the Subsurface Rules, 10-144 CMR 241, on land owned or controlled by the applicant. Or, a subsurface wastewater disposal system can be installed on land owned or controlled by the applicant and the applicant is eligible for grant funding pursuant to 38 M.R.S.A § 411-A, but no funding is available.
- (3) The discharge is not located within the boundaries of a sanitary or sewer district and the district has not agreed to service and maintain a holding tank at an annual fee that does not exceed those fees charged to other similar users of the district's services who are physically connected to the sewers of the district.
- (4) For a school such as the permittee's facility, the volume or quantity of waste water that is discharged does not exceed;
 - (a) the limit imposed by the previous license.
 - (b) the actual or estimated flow at the time of current application if a license volume increase is necessary.
- (5) The receiving water is not:
 - (a) A Class GPA, AA, A, or SA water;
 - (b) A tributary to Class GPA water; or
 - (c) A waterbody with a drainage area of less than 10 square miles,

unless it is demonstrated to the Department's satisfaction that no alternative to the discharge exists.
- (6) The discharge meets the requirements of *Maine's Pollution Control Laws* 38 M.R.S.A. §414-A, and *Maine's Water Classification Laws* 38 M.R.S.A. §§ 464 to 469.
- (7) The discharge receives best practicable treatment consistent with requirements in Section 9 of Department rule Chapter 596.

The discharge from the permittee's facility meets all the aforementioned criteria as a HHE 200 form dated July 28, 2010 from a licensed site evaluator indicates an on-site soil investigation has resulted in the LSE making the determination that there are no viable alternatives to the overboard discharge system. Therefore, the discharge is being permitted for another five-year term.

- b. Flow: The previous permitting action carried forward the monthly average and daily maximum discharge flow limitations of 3,000 gpd respectively, based on the dry weather design capacity of the treatment system and, eliminated the monthly average limit as the daily maximum limit is most restrictive. The previous permitting action also carried forward the requirement that effluent flow shall be measured continuously via a meter to ensure that representative discharge flow data are obtained. This permitting action carries forward all of these conditions.

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

A review of the monthly Discharge Monitoring Report (DMR) data for the period July 2010 – July 2015 indicate the values reported as follows:

Flow (DMRs=25)

Value	Limit (gpd)	Range (gpd)	Mean (gpd)
Daily Maximum	3,000	0 - 858	184

- c. Dilution Factors: The Department establishes applicable dilution factors for the discharge in accordance with freshwater protocols established in Department Rule Chapter 530, *Surface Water Toxics Control Program*, October 2005. Though the facility discharges to a Class SB waterbody, the Department has made a best professional judgment that at the point of discharge, the receiving water is dominated by fresh water and therefore dilution factors shall be calculated in accordance with freshwater protocols. With a discharge flow limit of 3,000 gpd (0.003 MGD) and rapid and complete mixing with the receiving water, dilution factors associated with the discharge from the facility may be calculated as follows:

Acute: 1Q10 = 22.8 cfs $\Rightarrow \frac{(22.8 \text{ cfs})(0.6464) + 0.003 \text{ MGD}}{0.003 \text{ MGD}} = 4,914:1$

Chronic: 7Q10 = 31.7 cfs $\Rightarrow \frac{(31.7 \text{ cfs})(0.6464) + 0.003 \text{ MGD}}{0.003 \text{ MGD}} = 6,831:1$

Harmonic Mean = 95.1 cfs $\Rightarrow \frac{(95.1 \text{ cfs})(0.6464) + 0.003 \text{ MGD}}{0.003 \text{ MGD}} = 20,492:1$

- d. Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS): The previous licensing action carried forward technology-based monthly average and daily maximum BOD₅ and TSS concentration limits of 30 mg/L and 50 mg/L, respectively. The monthly average concentration limit is based on secondary treatment requirements as defined in Department rule, 06-096 CMR Chapter 525(3)(III). The daily maximum BOD₅ and TSS concentration limits of 50 mg/L were based on a Department best professional judgment (BPJ) of best practicable treatment (BPT). In addition, pursuant to Department rule, 06-096 CMR Chapter 525(3)(III), the previous permitting action established a weekly average BPT concentration limit of 45 mg/L. This permitting action is carrying forward all of the above limitations.

The previous licensing action established mass limitations for BOD₅ and TSS. Department rule Chapter 523, *Waste Discharge License Conditions*, Section 6, *Calculating NPDES permit conditions*, sub-section f(1) states that, "all pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass...." This permitting action is carrying forward monthly average, weekly average and daily maximum BOD₅ and TSS mass limitations based on calculations using the design flow for the facility of 3,000 gpd (0.003 MGD) and the applicable concentration limits as follows:

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

Monthly Average Limit: (30 mg/L)(8.34 lbs./gallon)(0.003 MGD) = 1.0 lbs/day
 Weekly Average Limit: (45 mg/L)(8.34 lbs./gallon)(0.003 MGD) = 1.1 lbs/day
 Daily Maximum Limit: (50 mg/L)(8.34 lbs./gallon)(0.003 MGD) = 1.2 lbs/day

This permitting action is also carrying forward the requirement for a minimum of 85% removal of BOD5 and TSS pursuant to Chapter 525(3)(III)(a)(3) and (b)(3) of the Department’s rules. The permittee’s waste water treatment system does not have an influent sampling port location that is representative of raw waste water conditions. According to the USEPA’s Onsite Wastewater Treatment Systems Manual, dated February 2002, table 3-7 entitled “*Constituent Mass Loadings and Concentrations in Typical Residential Wastewater*” a reasonable influent value for BOD5 and TSS may be assumed to be 286 mg/L. Therefore, this permitting action authorizes the permittee to assume an influent BOD5 and TSS concentration value of 286 mg/L when calculating the monthly percent removal rate.

A review of the monthly Discharge Monitoring Report (DMR) data for the period July 2010 – July 2015 indicate the values reported as follows:

BOD Concentration (DMRs=39)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	1 - 35	6.04
Daily Maximum	50	1 - 35	6.08

TSS concentration (DMRs=39)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	1 - 37	9.03
Daily Maximum	50	1 - 37	9.14

- e. Settleable Solids: The previous permitting action established a daily maximum technology-based concentration limit of 0.3 ml/L for settleable solids and a minimum monitoring frequency of 1/Month. This permitting action carries forward these limits and monitoring frequency. A review of the monthly Discharge Monitoring Report (DMR) data for the period July 2010 – July 2015 indicate that the permittee has been in compliance with the 0.3 ml/L limit 100% of the time.
- f. Fecal Coliform Bacteria: The 8/28/00 permitting action established seasonal (May 15th – September 30th) monthly average and daily maximum concentration limits of 64 colonies/100 ml and 427 colonies/100 ml (instantaneous level) respectively, for the indicator organism *E. coli* bacteria. Though at the point of discharge the receiving water is dominated by freshwater, the non-attainment status for shellfish harvesting cited in Section 5, *Water Quality Conditions*, of this Fact Sheet is based on most probable numbers for fecal coliform bacteria. Therefore, to be consistent with the National Shellfish Sanitation Program (NSSP). The 2010 permitting action modified the indicator organism to fecal coliform bacteria and established seasonal monthly average and daily maximum concentration limits of 15 colonies/100 ml and 50 colonies/100 ml (instantaneous level) respectively, to be consistent with the NSSP. This permitting action carries forward all of the above limitations for fecal coliform bacteria.

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

A review of monthly DMR data for the period July 2010 – July 2015 (May through September of each year) indicate values reported as follows:

Fecal Coliform Bacteria (DMRs=7)

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	15	<1 – 438	72.3
Daily Maximum	50	<1 – 300,000	NC*

* NC- Not Calculated due to the extreme variation in the reported values.

It is noted non-compliance values were reported during the summer of 2006, 2007, 2008 and 2009, therefore, the previous permitting action increased the monitoring frequency from 1/Month to 2/Month given the on-going non-compliance and the non-attainment status of the receiving water due to elevated bacteria levels from OBDs in the watershed. This permitting action carries forward the 2/Month monitoring frequency for fecal coliform bacteria.

- g. Total Residual Chlorine (TRC): The previous permitting action carried forward a daily maximum technology based concentration limit of 1.0 mg/L along with a monitoring frequency of 2/Week for TRC. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or BPT-based limit. With dilution factors as determined above, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows:

<u>Acute (A) Criterion</u>	<u>Chronic (C) Criterion</u>	<u>A & C Dilution Factors</u>	<u>Calculated</u>	
			<u>Acute Threshold</u>	<u>Chronic Threshold</u>
0.013 mg/L	0.0075 mg/L	4,914:1 (A) 6,813:1 (C)	64 mg/L	51 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that dechlorinate the discharge in order to meet water quality based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively.

The calculated acute water quality-based threshold of 64 mg/L is less stringent than the technology-based standard of 1.0 mg/L. Therefore, this permitting action is carrying forward the technology based limit of 1.0 mg/L and the monitoring frequency of 2/Week. TRC monitoring is required any time chlorine-based compounds are in use for effluent disinfection. For instances when the permittee has not utilized chlorine-based compounds for effluent disinfection for an entire reporting period, the permittee shall report “NODI-9” for this parameter on the monthly discharge monitoring report (DMR).

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

A review of the monthly Discharge Monitoring Report (DMR) data for the period July 2010 – July 2015 indicates the permittee has been in and out of compliance with said limit(s). Values have been reported as follows:

Total residual chlorine (DMRs=7)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily maximum	1.0	0.20 – 2.20	1.2

- h. **pH:** The previous licensing action established a pH range limit of 6.0 – 9.0 standard units (SU), considered by the Department at the time, as BPT for secondary treated waste water but did not establish any monitoring frequency requirements. The previous permitting action did not require submittal of pH monitoring results. Pursuant to 06-096 CMR 523(5)(i)(2) and 06-096 CMR 523(5)(i)(5), this permitting action is establishing a requirement to sample pH once per year.
- i. **Whole Effluent Toxicity (WET) & Chemical Specific Testing:** Maine law, 38 M.R.S.A., §414-A and §420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department rule, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program* (toxics rule) sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on both invertebrate and vertebrate species. Priority pollutant monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. Analytical chemistry refers to a suite of chemical tests for ammonia-nitrogen, total aluminum, total cadmium, total chromium, total copper, total hardness (fresh water only), total lead, total nickel, total silver, total zinc, total arsenic, total cyanide (amenable to chlorination) and total residual chlorine.

Chapter 530 Section 2.A specifies the criteria for exemption of certain discharges from toxics testing as follows:

- (1) *Discharges from individual discharge points licensed to discharge less than 50,000 gallons per day of solely domestic wastewater and with a chronic dilution factor of at least 50 to 1, provided no holding tank wastes containing chemicals are accepted by the facility;*

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

(2) Discharges from residential overboard discharge systems; or

(3) Discharges from combined sewer overflow discharge points, provided the owner of the sewerage system is conducting or participating in a discharge abatement program.

The JWS facility is permitted to discharge a flow of less than 50,000 gallons per day, and has a chronic dilution factor of at least 50:1. Therefore, the facility is categorically exempt from the Chapter 530 testing requirements.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

Public notice of this application was made in the Ellsworth American newspaper on August 13, 2015. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

9. DEPARTMENT CONTACTS

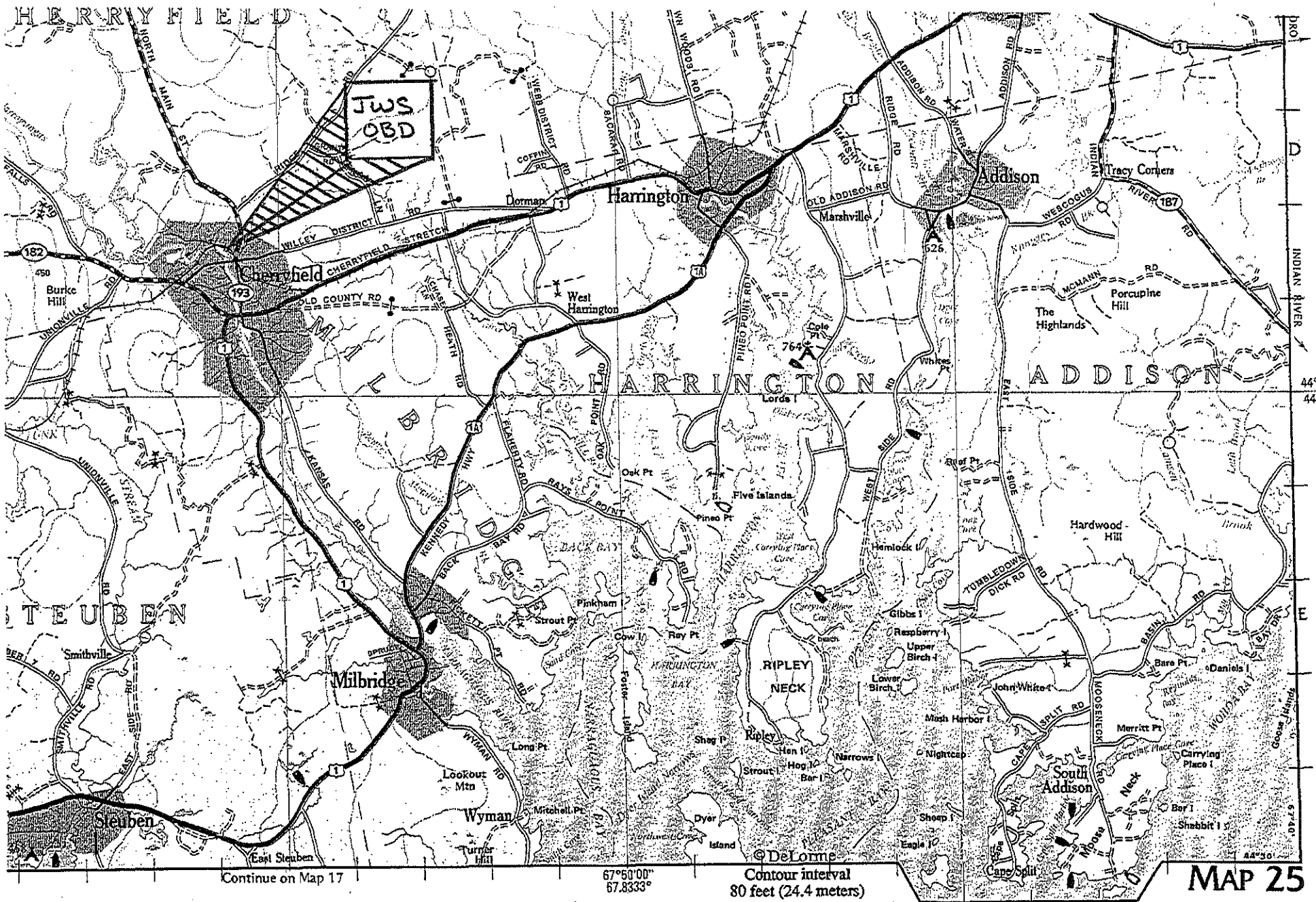
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Irene Saumur
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 485-2404
e-mail: irene.saumur@maine.gov

10. RESPONSE TO COMMENTS

Reserved through the formal 30 day Public Notice period.

ATTACHMENT A



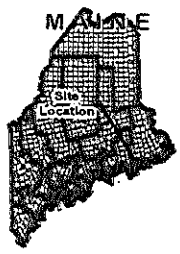
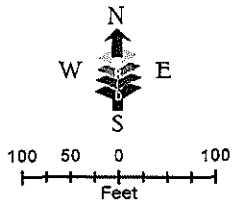
Continue on Map 17

67°50'00"
67.8333°

© DeLorme
Contour interval
80 feet (24.4 meters)

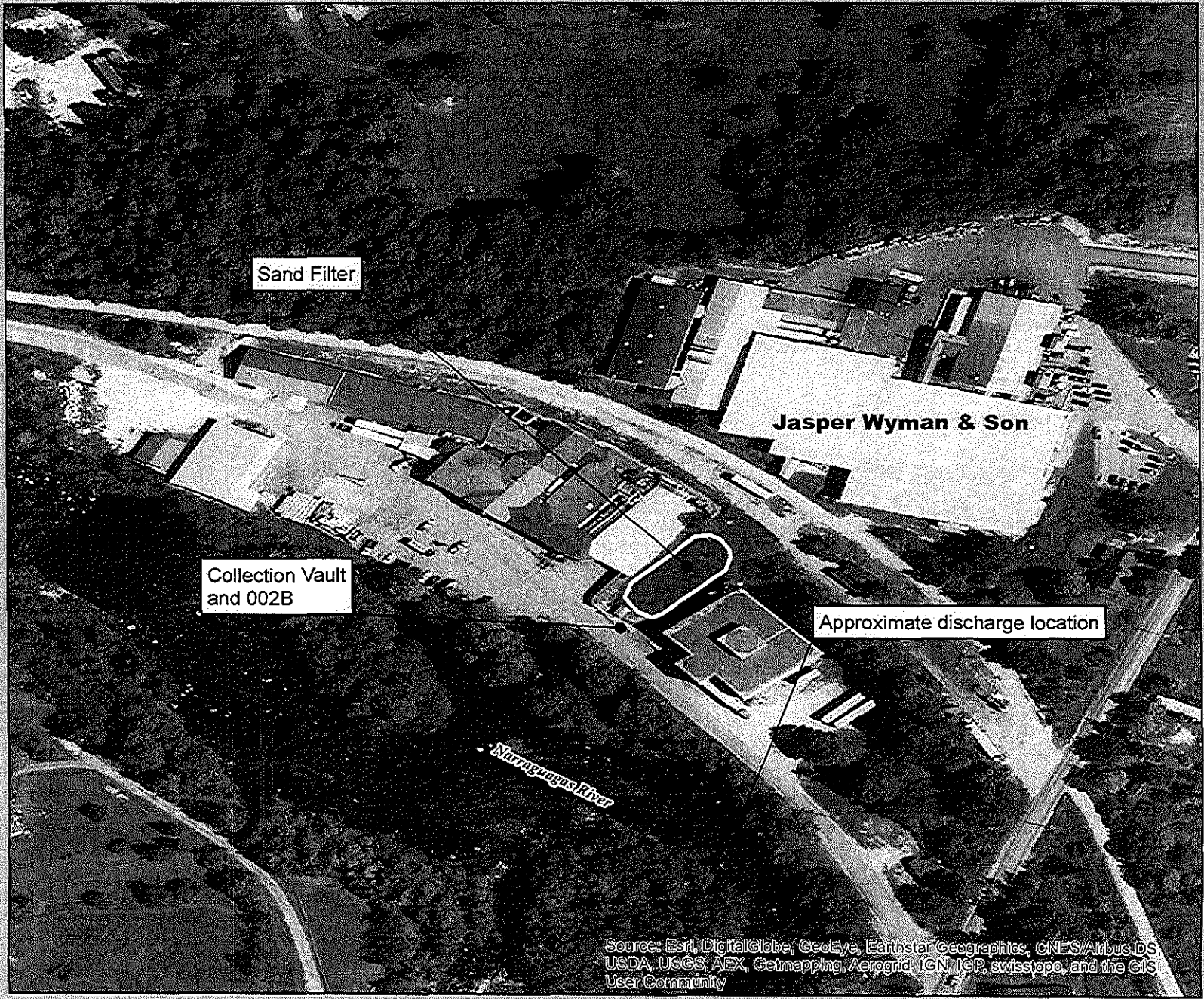
MAP 25

Treated Sanitary Wastewater Discharge Location Map



**Jasper Wyman & Son
Treated Sanitary Wastewater
Discharge Location Map
Project No.: 10030.006.2015
Updated: 8/20/2015 (lladd)**

- MAP NOTES:
- 1: SITE DATA DEVELOPED BY CES, INC. MAPPING IS INTENDED FOR REFERENCE PURPOSES ONLY.
 - 2: AERIAL IMAGES ARE AUGUST 2013 1-METER IMAGERY, PART OF THE NATIONAL AERIAL IMAGERY PROGRAM (NAIP). COURTESY OF USDA FSA, ACQUIRED FROM ESRI, 2015.
 - 3: MAP IS PROJECTED USING THE UNIVERSAL TRANSVERSE MERCATOR (UTM) PROJECTION, ZONE 19 NORTH, METERS AND REFERENCES THE NORTH AMERICAN DATUM OF 1983 (NAD83).
 - 4: NORTH ARROW IS REFERENCED TO GRID NORTH.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

ATTACHMENT B



Maine Department of Marine Resources

Pollution Area No. 53

Narraguagus River and vicinity to Harrington River
(Cherryfield, Milbridge, Harrington)

1/22/09

