STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

March 27, 2018

Steven Craig
Penobscot McCrum LLC.
28 Pierce Street
Belfast, ME 04915
scraig@pmcllc.org

Sent via electronic mail
Delivery confirmation requested

RE: *MEPDES Permit Number # ME0023043*
Maine Waste Discharge License (WDL) W004897-5O-H-R
Proposed Draft MEPDES Permit Renewal

Dear Steven Craig:

Enclosed is a proposed draft MEPDES permit and Maine WDL which the Department proposes to issue for your facility 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.
If you have any questions regarding the matter, please feel free to call me.

All comments must be received in the Department of Environmental Protection office on or before the close of business **Wednesday, April 25, 2018.** Failure to submit comments in a timely fashion will result in the final document being issued as drafted.

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

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

web site: www.maine.gov/dep

Comments in writing should be submitted to my attention at the following address:

Maine Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, ME 04333-0017
Aaron.A.Dumont@maine

If you have any questions regarding the matter, please feel free to call me at (207)-592-7161.

Sincerely,

Aaron Dumont
Division of Water Quality Management
Bureau of Water Quality
Aaron.A.Dumont@maine.gov
Phone: 207-592-7161

Enclosure

cc: Denise Behr, DEP/CMRO
Lori Mitchell, DEP/CMRO
David Webster, USEPA
Ellen Weitzler, USEPA
Olga Vergara, USEPA
Marelyn Vega, USEPA
Richard Carvalho, USEPA

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

PENOBSCOT MCCRUM LLC	)	MAINE POLLUTANT DISCHARGE
BELFAST, WALDO COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
FOOD PROCESSING FACILITY	)	AND
ME0023043	)	WASTE DISCHARGE LICENSE
W004897-5O-H-R **APPROVAL**	)	**RENEWAL**

In compliance with the applicable provisions of *Pollution Control*, 38 M.R.S. §§ 411 – 424-B, *Water Classification Program*, 38 M.R.S. §§ 464 – 470 and *Federal Water Pollution Control Act*, Title 33 U.S.C. § 1251, and applicable rules of the Department of Environmental Protection (Department), the Department has considered the application of the PENOBSCOT MCCRUM LLC (permittee), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On March 31, 2017, the Department accepted as complete for processing, a renewal application from the permittee for Waste Discharge License (WDL) W004895-5O-F-R/ Maine Pollutant Discharge Elimination System (MEPDES) permit ME0023043, which was issued on December 4, 2012, for a five-year term. The 12/4/12 MEPDES permit authorized the permittee to discharge a monthly average flow of 0.1 million gallons per day (MGD) of secondary treated process wastewater from a potato processing facility to the tidewaters of Belfast (Passagassawakeag River), Class SB, in Belfast, Maine.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the previous permitting action and subsequent minor revisions except that this permitting action is:

1. Amends the total copper daily maximum effluent limit to 0.07 lbs./day with 1/Year reporting requirement;

2. Establishes effluent monitoring and reporting requirements for cyanide amenable to chlorination CATC);

3. Revises the language for Screening Level Testing. Screening Level Testing must begin 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement;

4. Eliminating monitoring requirements for Outfall 002 as there are no longer any cooling water discharges happening from this outfall. Outfall 002 will be regulated under the facilities Multi Sector General Permit;

5. Establishes reduced Surveillance Level Wet testing based on facility test results; and

PERMIT SUMMARY (cont'd)

6. Establishes a Report% for Screening Level Wet testing for chronic species based on facility test results.

CONCLUSIONS

Based on the findings summarized in the attached **draft** Fact Sheet dated March 27, 2018, and subject to the special and standard conditions that follow, 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, *Classification of Maine waters,* 38 M.R.S. § 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 natural resource, that water quality will be maintained and protected;

   c. Where the standards of classification of the receiving waterbody are not met, the discharge will not cause or contribute to the failure of the waterbody to meet the standards of classification;

   d. Where the actual quality of any classified receiving waterbody 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 waterbody, 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 as defined in *Conditions of licenses,* 38 M.R.S. § 414-A(1)(D).

This space intentionally left blank

ACTION

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of PENOBSCOT MCCRUM LLC to discharge a monthly average of 0.1 MGD of secondary treated process wastewater to the tidewaters of Belfast (Passagassawakeag River), Class SB, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

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

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

3. This permit and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (amended October 19, 2015)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS ___ DAY OF _____ 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
PAUL MERCER, Commissioner

Date filed with Board of Environmental Protection_____

Date of initial receipt of application: March 31, 2017
Date of application acceptance: March 31, 2017

This Order prepared by Aaron Dumont, BUREAU OF WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated municipal sanitary wastewater from Outfall #001A** to Belfast Bay / Passagassawakeag River, Class SB, located in Belfast. Such discharges are limited and must be monitored by the permittee as specified below[(1)]:

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow *[50050]*	0.10 MGD *[03]*	Report MGD *[03]*	---	---	Continuous *[99/99]*	Recorder *[RC]*
BOD_5 *[00310]*	124 lbs./day *[26]*	182 lbs./day *[26]*	149 mg/L *[19]*	218 mg/L *[19]*	1/Month *[01/30]*	Composite *[24]*
TSS *[00530]*	124 lbs./day *[26]*	182 lbs./day *[26]*	149 mg/L *[19]*	218 mg/L *[19]*	1/Month *[01/30]*	Composite *[24]*
Settleable Solids *[00545]*	---	---	---	0.3 ml/L *[25]*	1/Week *[01/07]*	Grab *[GR]*
Oil & Grease [(2)] *[00552]*	---	---	---	15 mg/L *[19]*	2/Month *[02/30]*	Grab *[GR]*
Total Residual Chlorine[(3)] *[50060]*	---	---	---	0.2 mg/L *[19]*	3/Week *[03/07]*	Grab *[GR]*
pH (Std. Unit) *[00400]*	---	---	---	6.0 – 8.5 S.U. *[12]*	1/Day *[01/01]*	Grab *[GR]*
Copper (Total) *[01042]*	---	0.07 lbs./day *[26]*	---	Report ug/L *[28]*	1/Year *[01/YR]*	Composite *[24]*
Cyanide (CATC) *[00722]*	---	0.01 lbs./day *[26]*	---	Report ug/L *[28]*	1/Year *[01/YR]*	Composite *[24]*
Mercury (Total) [(4)] *[71900]*	---	---	50.8 ng/L *[3M]*	76.3 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*
Production[(5)] *[00145]*	Report (tons/day) *[2N]*	Report (tons/day) *[2N]*	---	---	1/Day *[01/01]*	Calculate *[CA]*

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

FOOTNOTES: See Pages 6 – 9 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

2. **SCREENING LEVEL TESTING:** Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement.

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity [6] **Acute – NOEL** *Americamysis bahia* (Mysid shrimp) *[TDM3E]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Chronic – NOEL *Arbacia punctulata* (Sea urchin) *[TBH3A]*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Analytical Chemistry [7,9] *[51477]*	---	---	---	Report ug/L *[28]*	1/Quarter *[01/90]*	Composite / Grab *[24/GR]*
Priority Pollutant [8,9] *[50008]*	---	---	---	Report ug/L *[28]*	1/Year *[01/YR]*	Composite / Grab *[24/GR]*

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

FOOTNOTES: See Pages 6– 9 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES

1. **Sampling** – The permittee must conduct all effluent sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for wastewater. Samples that are analyzed by laboratories operated by waste discharge facilities licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended April 1, 2010). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of 10-144 CMR 263. 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 this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR).

2. **Oil & Grease** – There must be at least 14 days between sampling events.

3. **Total residual chlorine (TRC)** – Limitations and monitoring requirements for TRC are applicable any time elemental chlorine or chlorine-based compounds are being utilized at the facility to disinfect the discharge. The permittee must utilize United States Environmental Protection Agency (USEPA)-approved test method capable of bracketing the TRC limitations specified in this permitting action.

4. **Mercury** – The permittee must conduct all mercury monitoring required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels*. All mercury analysis must be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry*. See **Attachment A** of this permit for a Department report form for mercury test results. Compliance with the monthly average limitation established in Special Condition A of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Method 1669 and analysis Method 1631E on file with the Department for this facility.

5. **Production** – The permittee must report production as tons/day of raw potatoes processed.

This space intentionally left blank

SPECIAL CONDITIONS

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

6. **Whole Effluent Toxicity (WET)** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 6.7% and 0.67% respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOELC. 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 fertilization for the sea urchin as the end point. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable acute and chronic dilution factors of 15:1 and 151:1, respectively. See **Attachment B** of this permit for a copy of the Department's WET reporting form.

   a. **Surveillance level testing** – Surveillance level testing is waived pursuant to *Surface Water Toxics Control Program,* 06-096 CMR 530(2)(D)(3)(b) (effective March 12, 2012).

   b. **Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level WET testing at a minimum frequency of once per year (1/Year). Acute tests must be conducted on the mysid shrimp (*Americamysis bahia*); chronic tests must be conducted on the sea urchin (*Arbacia punctulata*).

   WET test results must be submitted to the Department not later than the next 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 must evaluate test results being submitted and identify to the Department possible exceedances of the critical acute and chronic water quality thresholds of 6.7% and 0.67%.

   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 Organism*s, 5th ed. USEPA 821-R-02-012. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the acute method manual);

This space intentionally left blank

SPECIAL CONDITIONS

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

b. U.S. Environmental Protection Agency. 2002. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organism*s, 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 must be reported on the "*Whole Effluent Toxicity Report Marine Waters*" form included as **Attachment B** of this permit each time a WET test is performed. Each time a WET test is performed, the permittee must sample and analyze for the parameters in the WET Chemistry and the Analytical Chemistry sections of the Department form entitled, *Maine Department of Environmental Protection, WET and Chemical Specific Data Report Form* included as **Attachment C** of this permit.

7. Analytical chemistry – Refers to a suite of chemicals in **Attachment C** of this permit.

a. **Surveillance level testing** – Surveillance level testing is not required pursuant to 06-096 CMR 530(2)(D)(3)(b).

b. **Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level analytical chemistry testing at a minimum frequency of once per calendar quarter (1/Quarter).

8. Priority pollutant testing – Priority pollutants are those parameters listed in **Attachment C** of this permit.

a. **Surveillance level testing** – Surveillance level testing is not required pursuant to 06-096 CMR 530(2)(D)(3)(b).

b. **Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year).

This space intentionally left blank

SPECIAL CONDITIONS

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

9. Analytical chemistry and priority pollutant – Testing must be conducted on samples collected at the same time as those collected for whole effluent toxicity tests when applicable. Priority pollutant and analytical chemistry testing shall be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve minimum reporting levels of detection as specified by the Department.

Test results must be submitted to the Department not later than the next 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 must evaluate test results being submitted and identify to the Department, possible exceedances of the acute, chronic or human health Ambient Water Quality Criteria (AWQC) as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005). For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "0" **(zero)** monitoring not required this period.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The permittee must not discharge effluent that contains 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 permittee must not discharge effluent that contains 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 permittee must not discharge effluent that imparts color, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsafe for the designated uses and characteristics ascribed to their classification.

4. The permittee must not discharge effluent that lowers 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. TREATMENT PLANT OPERATOR

The person who has management responsibility over the treatment facility must hold a minimum of a **Maine Grade II,** Biological Treatment certificate (or Registered Maine Professional Engineer) pursuant to *Sewage Treatment Operators*, 32 M.R.S. §§ 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.

SPECIAL CONDITIONS

D. 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 March 31, 2017; 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of wastewater from any other point source(s) are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit.

E. OPERATIONS AND MAINTENANCE (O&M) PLAN

The permittee must maintain a current written comprehensive Operation & Maintenance (O&M) Plan for the facility. The plan must provide a systematic approach by which the permittee must 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 must 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 must 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 must submit the updated O&M Plan to their Department inspector for review and comment.

F. 06-096 CMR 530(2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING

By December 31 of each calendar year, the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit ***[ICIS Code 75305]***. See **Attachment D** of the permit for an acceptable certification form to satisfy this Special Condition.

a. Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;

b. Changes in the operation of the treatment works that may increase the toxicity of the discharge;

c. Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge;

In addition, in the comments section of the certification form, the permittee must provide the Department with statements describing;

SPECIAL CONDITIONS

F. 06-096 CMR 530(2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING (cont'd)

d. Changes in stormwater collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge; and

e. Increases in the type or volume of transported (hauled) wastes accepted by the facility.

The Department may require that routine surveillance level testing be re-instated if it determines that there have been changes in the character of the discharge or if annual certifications described above are not submitted.

G. MONITORING AND REPORTING

Electronic Reporting

NPDES Electronic Reporting, 40 C.F.R. 127, requires MEPDES permit holders to submit monitoring results obtained during the previous month on an electronic discharge monitoring report to the regulatory agency utilizing the USEPA electronic system.

Electronic Discharge Monitoring Reports (DMRs) submitted using the USEPA NetDMR system, must be:

1. Submitted by a facility authorized signatory; and
2. Submitted no later than **midnight on the 15th day of the month** following the completed reporting period.

Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the DEP toxsheet reporting form. An electronic copy of the Toxsheet reporting document must be submitted to your Department compliance inspector as an attachment to an email. In addition, a hardcopy form of this sheet must be signed and submitted to your compliance inspector, or a copy attached to your NetDMR submittal will suffice. Documentation submitted electronically to the Department in support of the electronic DMR must be submitted no later than midnight on the 15th day of the month following the completed reporting period.

This space intentionally left blank

SPECIAL CONDITIONS

G. MONITORING AND REPORTING (cont'd)

Non-electronic Reporting

If you have received a waiver from the Department concerning the USEPA electronic reporting rule, or are permitted to submit hardcopy DMR's to the Department, then your monitoring results obtained during the previous month must 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.

Toxsheet reporting forms must be submitted electronically as an attachment to an email sent to your Department compliance inspector. In addition, a signed hardcopy of your toxsheet must also be submitted.

A signed copy of the DMR and all other reports required herein must be submitted to the Department assigned compliance inspector (unless otherwise specified) following address:

Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04330

H. REOPENING OF PERMIT FOR MODIFICATION

In accordance with 38 M.R.S. § 414-A(5) and 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 monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

I. SEVERABILITY

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

ATTACHMENT A

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

ATTACHMENT B

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WHOLE EFFLUENT TOXICITY REPORT
MARINE WATERS

Facility Name _____ MEPDES Permit # _____

Pipe # _____

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 _____ Date Tested _____

mm/dd/yy 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		

Salinity Adjustment	
brine	
sea salt	
other	

place * next to values statistically different from controls

Reference toxicant	mysid shrimp	sea urchin
	A-NOEL	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."

ATTACHMENT C

Maine Department of Environmental Protection
WET and Chem
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

Facility Name _____ **MEPDES #** _____ **Pipe #** _____ Facility Representative Signature _____
To the best of my knowledge this information is true, accurate and complete.

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

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

Date Sample Collected _____ **Date Sample Analyzed** _____

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

Last Revision - July 1, 2015

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.

WHOLE EFFLUENT TOXICITY

			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					Acute	Chronic	
	Mysid Shrimp										
	Sea Urchin										

WET CHEMISTRY

	pH (S.U.) (9)										
	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, TOTAL	5				(8)					
	CYANIDE, AVAILABLE [3a]	5				(8)					
M	LEAD	3				(8)					
M	NICKEL	5				(8)					
M	SILVER	1				(8)					
M	ZINC	5				(8)					

Maine Department of Environmental Protection
WET and Chem
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

	PRIORITY POLLUTANTS [4]		Effluent Limits						Possible Exceedence [7]		
		Reporting Limit	Acute[6]	Chronic[6]	Health[6]			Reporting Limit Check	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	5									
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	20									
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	5									
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	5									
BN	BENZO(G,H,I)PERYLENE	5									
BN	BENZO(K)FLUORANTHENE	5									
BN	BIS(2-CHLOROETHOXY)METHANE	5									
BN	BIS(2-CHLOROETHYL)ETHER	6									
BN	BIS(2-CHLOROISOPROPYL)ETHER	6									
BN	BIS(2-ETHYLHEXYL)PHTHALATE	10									
BN	BUTYLBENZYL PHTHALATE	5									
BN	CHRYSENE	5									
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									
BN	FLUORANTHENE	5									

Maine Department of Environmental Protection
WET and Chem
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

BN	FLUORENE	5									
BN	HEXACHLOROBENZENE	5									
BN	HEXACHLOROBUTADIENE	5									
BN	HEXACHLOROCYCLOPENTADIENE	10									
BN	HEXACHLOROETHANE	5									
BN	INDENO(1,2,3-CD)PYRENE	5									
BN	ISOPHORONE	5									
BN	N-NITROSODI-N-PROPYLAMINE	10									
BN	N-NITROSODIMETHYLAMINE	5									
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									
V	ACROLEIN	NA									
V	ACRYLONITRILE	NA									
V	BENZENE	5									

Maine Department of Environmental Protection
WET and Chem
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

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.

(3a) Cyanide, Available (Cyanide Amenable to Chlorination) is not an analytical chemistry parameter, but may be required by certain discharge permits .

(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:

ATTACHMENT D

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES#_____Facility Name_____

Since the effective date of your permit, have there been;		NO	YES Describe in comments section
1	Increases in the number, types, and flows of industrial, commercial, or domestic discharges to the facility that in the judgment of the Department may cause the receiving water to become toxic?	☐	☐
2	Changes in the condition or operations of the facility that may increase the toxicity of the discharge?	☐	☐
3	Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge?	☐	☐
4	Increases in the type or volume of hauled wastes accepted by the facility?	☐	☐

COMMENTS:

Name (printed): _____

Signature:_____Date: _____

This document must be signed by the permittee or their legal representative.

This form may be used to meet the requirements of Chapter 530.2(D)(4). This Chapter requires all dischargers having waived or reduced toxic testing to file a statement with the Department describing changes to the waste being contributed to their system as outlined above. As an alternative, the discharger may submit a signed letter containing the same information.

Scheduled Toxicity Testing for the next calendar year

Test Conducted	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
WET Testing	□	□	□	□
Priority Pollutant Testing	□	□	□	□
Analytical Chemistry	□	□	□	□
Other toxic parameters [1]	□	□	□	□

Please place an "X" in each of the boxes that apply to when you will be conducting any one of the three test types during the next calendar year.

[1] This only applies to parameters where testing is required at a rate less frequently than quarterly.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **March 27, 2018**

PERMIT NUMBER: **ME0023043**
WASTE DISCHARGE LICENSE: **W004897-5O-H-R**

NAME AND ADDRESS OF APPLICANT: **PENOBSCOT MCCRUM LLC**
28 PIERCE STREET
BELFAST, ME 04915

COUNTY: **WALDO**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):
PENOBSCOT MCCRUM LLC
28 PIERCE STREET
BELFAST, ME 04915

RECEIVING WATER CLASSIFICATION: **TIDEWATERS OF BELFAST**
PASSAGASSAWAKEAG RIVER, CLASS SB

COGNIZANT OFFICIAL CONTACT INFORMATION:
STEVE CRAIG
(207)-338-4360
scraig@pmcllc.org

1. APPLICATION SUMMARY

On March 31, 2017, the Department of Environmental Protection (Department) accepted as complete for processing, a renewal application from Penobscot McCrum LLC. (permittee) for Waste Discharge License (WDL) W004897-5O-F-R/ Maine Pollutant Discharge Elimination System (MEPDES) permit ME0023043, which was issued on December 4, 2012, for a five-year term. The 12/4/12 MEPDES permit authorized the permittee to discharge a monthly average flow of 0.1 million gallons per day (MGD) of secondary treated process wastewater from a potato processing facility to the tidewaters of Belfast (Passagassawakeag River), Class SB, in Belfast, Maine. See **Attachment A** of this fact sheet for a location map.

This space intentionally left blank

2. PERMIT SUMMARY

a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the previous permitting action and subsequent minor revisions except that it:

1. Amends the total copper daily maximum effluent limit to 0.07 lbs./day with 1/Year reporting requirement;

2. Establishes effluent monitoring and reporting requirements for cyanide amenable to chlorination (CATC);

3. Revises the language for Screening Level Testing. Screening Level Testing must begin 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement;

4. Eliminating monitoring requirements for Outfall 002 as there are no longer any cooling water discharges happening from this outfall. Outfall 002 will be regulated under the facilities Multi Sector General Permit;

5. Establishes reduced Surveillance Level Wet testing based on facility test results;

6. Establishes a Report% for Screening Level Wet testing for chronic species based on facility test results.

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

September 14, 1983 – The Department issued WDL #4897 for a five-year term.

December 12, 1986 – The Department issued a modification of WDL #4897 which increased the daily maximum flow limitation from 0.10 MGD to 0.20 MGD. The flow increase was necessary to accommodate consolidation of the licensee's Spring Street and Pierce Street plants.

July 21, 1987 – The USEPA issued NPDES permit #ME0023043 for a five-year term.

May 24, 1989 – The licensee (then Penobscot Frozen Foods (PFF)) and the Department entered into an Administrative Consent Agreement (CA) and Enforcement Order for numerous license violations for BOD_5, TSS, settleable solids and oil & grease. The Order required PFF to construct a biological wastewater treatment facility.

July 12, 1989 – The Department issued WDL #W004897-42-B-R for a five-year term.

March 1990 – As stipulated by the 5/24/89 CA, PFF completed the construction of, and had operational, a sequencing batch reactor (SBR) biological wastewater treatment facility.

August 27, 1993 − The licensee applied for renewal of WDL #W004897-42-B-R, but withdrew the application on September 13, 1993.

2. PERMIT SUMMARY (cont'd)

February 17, 1995 – The Department issued a letter to the licensee stating that the process wastewater discharge from the PFF facility was not subject to whole effluent toxicity (WET) or priority pollutant (chemical specific) testing stipulated in a newly promulgated Department regulation, Chapter 530.5, *Surface Water Toxics Control Program*, dated October 12, 1994.

June 1, 2000 – Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and *Waste discharge licenses*, 38 M.R.S. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W004897-42-B-R.

August 21, 2001 – The Maine Superior Court issued a Consent Order to PFF for violations of the State's water quality laws and WDL #W-004897-42-B-R which was issued by the Department on July 12, 1989. The Consent Order required PFF to submit a comprehensive facility plan for the renovation, expansion or replacement of the existing wastewater treatment facility and pay a monetary penalty for the violations.

July 10, 2002 − The Department issued WDL #W-004897-5O-C-R / MEPDES Permit #ME0023043 for the discharge of up to a monthly average of 0.1 MGD and a daily maximum of 0.15 MGD of secondary treated potato process water as well as the discharge of up to a daily maximum of 0.075 MGD of non-contact cooling water to the tidewaters of Belfast / Passagassawakeag River. The Permit/WDL was issued for a five-year term.

November 9, 2004 − The Department issued WDL #W-004897-5O-D-T / MEPDES Permit #ME0023043, transferring the MEPDES Permit / Maine WDL from PFF to Penobscot McCrum, LLC (PM LLC).

March 8, 2006 – The Department informed PM LLC via letter that changes being undertaken to the Surface Water Toxics Control Program pursuant to the adoption of Department rule Chapter 530 would likely result in toxicity testing requirements with the next MEPDES Permit / Maine WDL renewal.

October 15, 2007 – The Department issued combination WDL #W-004897-5O-E-R / MEPDES Permit #ME0023043 for a five-year term.

February 6, 2012 – The Department issued a modification of WDL #W-004897-5O-E-R / MEPDES Permit #ME0023043 for reduction of mercury testing frequency from 2/Year to 1/Year based on *Certain deposits and discharges prohibited*, 38 M.R.S., § 420 sub-§1-B(F).

September 24, 2012 – The Department issued combination MEPDES # ME0023043/WDL #W004897-5O-E-R for a five-year term.

March 31, 2017 – The permittee submitted a timely and complete application to the Department to renew MEPDES #ME0023043/WDL W004897-5O-F-R to discharge a monthly average flow of 0.1 million gallons per day (MGD) of secondary treated process wastewaters from a potato processing facility located at 28 Pierce Street in Belfast. The application was accepted for processing by the Department on March 31, 2017.

2. PERMIT SUMMARY (cont'd)

c. Source Description: The permittee processes potatoes by baking, blanching and frying them into frozen food products. The water used in permittee's processing is obtained from the Belfast Water District. The permittee reported production numbers in their most recent WDL renewal application. On an average the permittee processes 93,473 pounds of raw potatoes per day, with a maximum of 149,220 pounds per day, and an overall total of 30,529,960 pounds per year of potatoes processed into frozen potato products.

Most of the wastewater generated in the manufacturing process is the result of equipment and floor washing that takes place hourly with additional mid-day and end-of-day washdowns. This wastewater is discharged to the receiving water via Outfall #001A. The permittee has provided the Department with a list of chemicals used for sanitation or disinfection during production and clean-up operations. Additional wastewater consists of flow from the oven room, which is the result of condensed moisture drawn from the potatoes, condensate from an air compressor, and condensate from the freezer equipment in the freezer/defrost holding room. This wastewater stream is directed to the facilities onsite waterwater treatment system. All potatoes are washed at the permittee's Washburn, Maine facility and then transported to the Belfast facility.

Potato waste material is trucked to farms for agronomic utilization. All sanitary wastewater flows from the facility are conveyed to the Belfast wastewater treatment facility, which is permitted separately under MEPDES permit #ME0101532.

d. Wastewater Treatment: The permittee's water use is as represented in Fact Sheet **Attachment B**. The permittee operates a sequencing batch reactor (SBR) biological wastewater treatment facility to provide treatment of all processing wastewater. The wastewater facility provides a secondary level of treatment via settling in two lamellae clarifiers and one SBR unit. In 2006, to address previous oil and grease effluent limit exceedances, the permittee supplemented its facility infrastructure with the installation of two oil and grease skimmer units, one in the blanch room and one in the treatment plant's lamellae clarifiers. The permittee discharges treated processing wastewater through Outfall #001A, two to three times per 24-hour period. Each discharge event consists of approximately 15,000 gallons of wastewater, for a total average discharge of approximately 46,000 gallons per day (GPD) and a maximum discharge of approximately 90,000 GPD. Outfall #001A consists of a 12-inch diameter pipe that outlets into Belfast Bay in a depth of approximately 10-feet at mean low water.

The permittee has ceased discharging potato moisture condensate, non-contact cooling water, and air and refrigeration condensate through Outfall 002. Outfall 002 discharges stormwater through 12-inch diameter culvert that runs beneath an adjacent railroad track and outlets to the ground surface, with discharged flows eventually reaching the intertidal portion of Belfast Bay.

This space intentionally left blank

3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require the 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, *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and Department rule *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective March 21, 2012), require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective July 29, 2012), 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

Classification of estuarine and marine waters, 38 M.R.S. § 469(6) classifies all estuarine and marine waters lying within the boundaries of Waldo County that are not otherwise classified are class SB, which includes Belfast Harbor at the point of discharge, as Class SB waters. *Standards for classification of estuarine and marine waters*, 38 M.R.S. § 465-B(2), describes the standards for Class SB waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2014 Integrated Water Quality Monitoring and Assessment Report, prepared pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the marine waters at the permittee's outfall (Waterbody ID 722-41) as, *Category 4-A(b), Estuarine and Marine Waters with Impaired Use, TMDL Completed (TMDL completed for listed causes and bacteria from combined sewer overflows)* The impairment may be either recreational uses (swimming) or shellfish consumption or both. Shellfish consumption impairments only apply to waters naturally capable of supporting the shellfish harvesting use (i.e. waters of high enough salinity for propagation of shellfish).

The Maine Department of Marine Resources (MEDMR) closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (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 and current shoreline surveys. In addition, the MEDMR 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 #32 is closed to the harvesting of shellfish due the location of the Town's wastewater treatment plant outfall. The shellfish closure area can be found at http://www.maine.gov/dmr/shellfish-sanitation-management/closures/pollution.html

Category 5-D*: Estuarine and Marine Waters Impaired by Legacy Pollutants*. All estuarine and marine waters capable of supporting American lobster are listed in Category 5-D, partially supporting fishing ("shellfish" consumption) due to elevated levels of polychlorinated biphenyls (PCBs) and other persistent, bioaccumulating substances in lobster tomalley. The permittee will not cause or contribute to the failure of the receiving waters to meet the standards of its designated classification.

This space intentionally left blank

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The previous permitting action established, and this permitting action is carrying forward, effluent limitations and monitoring requirements for one process outfall: Outfall #001A for process wastewaters.

Outfall #001A – Process waters

The Department reviewed 57 Discharge Monitoring Reports (DMRs) that were submitted for Outfall #001A for the period of December 4, 2012 – October 26, 2017. A review of the data indicates that following:

Flow (DMRs=57)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.10	0.04 – 0.05	0.046
Daily Maximum	Report	0.05 – 0.51	0.090

The previous permitting action established, and this permitting action is carrying forward the monthly average flow limitation of 0.10 MGD and the continuous monitoring requirement.

a. Dilution Factors: 06-096 CMR 530(4)(A)(2)(a) states that, *"For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model."*

As indicated in Fact Sheet Section 6 of the previous permitting action, the Department utilized facility plan and profile information provided by the permittee and calculations based on interpretation of the CORMIX model whose parameters include facility permitted flows, outfall/diffuser configuration (pipe 12" in diameter with no diffuser); and in-stream mixing characteristics (based on 15 minute travel time) determined from modeling and/or field to establish applicable dilution factors (that are being carried forward in this permitting action, Dilution information for Outfall #001A is as follows:

Acute = 15:1 Chronic = 151:1 Harmonic mean[(1)] = 453:1

Notes:

[1]The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the U.S. EPA publication, "*Technical Support Document for Water Quality-Based Toxics Control"* (Office of Water; USEPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.

This space intentionally left blank

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

b. Production: The previous permitting action established, and this permitting action is carrying forward, reporting of monthly average and daily maximum production in tons/day of raw potatoes processed. The Department reviewed 57 Discharge Monitoring Reports DMRs that were submitted for Outfall #001A for the period of December 4, 2012 – October 26, 2017 a review of the data indicates that following:

Production (DMRs = 57)

Value	Limit (tons/day)	Range (tons/day)	Mean (tons/day)
Monthly Average	Report	31 − 75	55
Daily maximum	Report	49 − 98	79

The Department considers 65 tons/day used in subsequent permitting actions to be representative of normal production at the permittee's facility. This permitting action is carrying forward monthly average and daily maximum production reporting requirements.

c. Biochemical Oxygen Demand and Total Suspended Solids: The previous permitting action established monthly average and daily maximum mass limits for BOD_5 and TSS based on State of Maine technology based guidelines developed in 1976 for the potato processing industry. The guidelines established production based limits for BOD_5 and TSS of 0.95 lbs./1000 lbs. (1.9 lbs./ton) of raw potatoes processed as the monthly average limit and 1.4 lbs./1000 lb. (2.8 lbs./ton) of raw potatoes processed as the daily maximum limit.

Per USEPA guidance, the average actual production is to be used for development of National Effluent Guideline based effluent limits. At the time of the previous permitting action the Department's review of DMR data for the period of March 2004 through March 2007 indicated a mean monthly average production of 65 tons/day during the three year period. Based on this, technology based mass limits were calculated as follows:

Monthly average: 65 tons/day (1.9 lbs./ton) = 124 lbs./day
Daily Maximum: 65 tons/day (2.8 lbs./ton) = 182 lbs./day

The previous permitting action established technology based concentration limits from the mass limits calculated above, monthly average flow limit, and a conversion factor of 8.34 lbs./gallon, as follows:

Monthly average: 124 lbs./day / (0.1 MGD x 8.34 lbs./gal) = 149 mg/L
Daily Maximum: 182 lbs./day / (0.1 MGD x 8.34 lbs./gal) = 218 mg/L

This space intentionally left blank

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

The Department reviewed DMRs that were submitted for BOD and TSS at Outfall #001A for the reporting period of December 4, 2012 – October 26, 2017 a review of the data indicates that following:

BOD Mass (DMRs=52)

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	124	0.7 – 97	9.5
Daily Maximum	182	0.7 – 97	10.4

BOD Concentration (DMRs=52)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	149	2.6 – 220	24
Daily Maximum	218	2.6 – 220	24

For the reporting period of December 4, 2012 – October 26, 2017, there was one excursion from the monthly average concentration reporting limit of 149 mg/L and the Daily Maximum concentration reporting limit of 218 mg/L.

TSS Mass (DMRs=57)

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	124	1.10 – 32	8.0
Daily Maximum	182	1.10 – 32	8.1

TSS Concentration (DMRs=57)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	149	3 – 55	19.0
Daily Maximum	218	3 – 55	19.2

The previous permitting action established, and this permitting action is carrying forward monthly average and daily maximum for concentration and mass and a 1/month monitoring frequency for BOD and TSS.

d. Settleable Solids: The previous permitting action established and this permitting action is carrying forward a daily maximum technology limit of 0.3 ml/L for settleable solids, which is considered by the Department as a best professional judgment of Best Practicable Technology (BPT) for secondary treated wastewater, along with a minimum monitoring frequency requirement of 1/Week.

The Department reviewed 57 DMRs that were submitted for Outfall #001A for the period September December 4, 2012 – October 26, 2017. A review of the data indicates that following:

Settleable Solids Concentration (DMRs=57)

Value	Limit (ml/L)	Range (ml/L)	Average (ml/L)
Daily Maximum	0.3	0.00 – 0.30	0.26

The previous permitting action established, and this permitting action is carrying forward a concentration of 0.3 mg/L and a monitoring frequency of 1/week.

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

e. Oil & Grease – The previous permitting actions established a daily maximum concentration limit of 15 mg/L for oil and grease, based on BPJ of BPT and water quality based limit necessary so as not to cause a visible oil sheen on the surface of the receiving waters (Permit Special Condition B(1).

It is noted that in June 2006, the permittee installed two oil and grease skimmer units, one in the blanch room and one in the treatment plant's lamellae clarifiers. A review of the DMR data for Outfall #001A for the period December 4, 2012 – October 26, 2017, indicates that the daily maximum values have been reported as follows:

Oil & Grease (DMRs = 57)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily maximum	15	4.2 − 13	5.5

This permitting action is carrying forward the daily maximum concentration limit of 15 mg/L for oil and grease along with the 2/month monitoring frequency.

f. Total Residual Chlorine (TRC): 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 previous permitting action established a monthly average technology based limit of 0.2 mg/L. End-of-pipe water quality based thresholds for TRC were calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	A & C Acute Dilution Factors	Calculated Acute Threshold	Calculated Chronic Threshold
0.013 mg/L	0.0075 mg/L	15:1 (A) 151:1 (C)	0.2 mg/L	1.1 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 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 BPT limits of 0.3 mg/L and 0.1 mg/L respectively. In the case of the permittee, the calculated acute water quality limit of 0.2 mg/L is more stringent than 1.0 mg/L. The previous permitting action established, and this permitting action is carrying forward the daily maximum limit of 0.2 mg/L.

This space intentionally left blank

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

The Department reviewed 57 DMRs that were submitted for the monitoring period of December 4, 2012 – October 26, 2017, indicates that the daily maximum values have been reported as follows:

Total Residual Chlorine (DMRs=57)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	0.2	0.03 – 0.20	0.146

g. pH: The previous permitting action established, and this permitting action is carrying forward, a technology-based pH limit of 6.0 – 8.5 standard units (SU), which is based on BPJ of BPT and a minimum monitoring frequency requirement of 1/Day.

The Department reviewed 57 DMRs that were submitted for the monitoring period of December 4, 2012 – October 26, 2017, indicates as follows:

pH (DMRs=57)

Value	Limit (SU)	Minimum (SU)	Maximum
Range	6.0 – 8.5	6.26	8.40

h. Mercury: Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and *Waste Discharge Licenses*, 38 M.R.S. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), the Department issued an interim average and daily maximum effluent concentration limits of 50.8 parts per trillion (ppt) and 76.3 ppt, respectively, and a minimum monitoring frequency requirement of two (2) tests per year for mercury. 38 M.R.S. § 420(1-B)(B)(1) provides that a facility is not in violation of the Ambient Water Quality Criteria (AWQC) for mercury if the facility is in compliance with an interim discharge limit established by the Department. A review of the Department's data base for the period October 19, 1999 – March 30, 2016 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows:

Mercury (DMRs=54)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average	50.8	0.50 – 39.40	2.2
Daily Maximum	76.3		

The Department issued a minor revision on February 6, 2012, to the October 15, 2007, permit thereby revising the minimum monitoring frequency requirement from twice per year to once per year given the permittee has maintained at least 5 years of mercury testing data. Pursuant to 38 M.R.S. § 420(1-B)(F), this permitting action is carrying forward the 1/Year monitoring frequency established in the February 6, 2012, permit modification.

This space intentionally left blank

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

i. Whole Effluent Toxicity (WET) and Chemical-Specific Testing: 38 M.R.S. § 414-A and 38 M.R.S. § 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. 06-096 CMR 530 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. 06-096 CMR 584 sets 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 06-096 CMR 530, is included in this permit in order to characterize the effluent. 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 the mysid shrimp *(Americamysis bahia)* and the sea urchin *(Arbacia punctulata)*. Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. Priority pollutant testing refers to the analysis for levels of priority pollutants listed under "Priority Pollutants" on the form included as **Attachment C** of the permit. Analytical chemistry refers to those pollutants listed under "Analytical Chemistry" on the form included as **Attachment C** of the permit.

06-096 CMR 530(2)(A) specifies the dischargers subject to the rule as:

> All licensed dischargers of industrial process wastewater or domestic wastes is discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedances of narrative or numerical water quality criteria.

Penobscot McCrum LLC., discharges (potato processing) wastewater to surface waters and is therefore subject to the testing requirements of the toxics rule.

06-096 CMR 530(2)(B) categorizes discharges subject to the toxics rule into one of four levels (Level I through IV). The four categories for dischargers are as follows:

Level I	Chronic dilution factor of <20:1
Level II	Chronic dilution factor of ≥20:1 but <100:1.
Level III	Chronic dilution factor ≥100:1 but <500:1 or >500:1 and Q ≥1.0 MGD
Level IV	Chronic dilution factor >500:1 and Q ≤1.0 MGD

This space intentionally left blank

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

Based on the Chapter 530 criteria, the permittee's facility falls into the Level III frequency category as the facility has a chronic dilution factor >100:1 but <500:1 or >500:1 and Q ≥1.0 MGD. 06-096 530(2)(D)(1) specifies that routine screening and surveillance 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

This permit 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.

j. Whole Effluent Toxicity (WET) Evaluation: 06-096 CMR 530(3)(E) states:

> For effluent monitoring data and the variability of the pollutant in the effluent**,** the Department shall apply the statistical approach in Section 3.3.2 and Table 3-2 of USEPA's "Technical Support Document for Water Quality-Based Toxics Control" (USEPA Publication 505/2-90-001, March, 1991, EPA, Office of Water, Washington, D.C.) to data to determine whether water-quality based effluent limits must be included in a waste discharge license. Where it is determined through this approach that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedance of water quality criteria, appropriate water quality-based limits must be established in any licensing action.

On September 12, 2017, the Department conducted a statistical evaluation on the most recent 53 months of WET test results on file with the Department for the permittee in accordance with the statistical approach outlined above. The 9/12/17 statistical evaluation indicates that none of the results had a reasonable potential to exceed the chronic or acute ambient water quality threshold. See **Attachment C** of this Fact Sheet for a summary of the WET test results.

Based on the provisions of 06-096 CMR 530 and Department best professional judgment, this permitting action establishing the reduced surveillance level WET testing requirements for this facility. Special Condition F. 06-096 CMR 530(2)(D)(4) Statement For Reduced/Waived Toxics Testing of this Permit explains the statement required by the discharger to reduce WET testing.

This space intentionally left blank

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

k. Analytical Chemistry & Priority Pollutant Testing Evaluation:

06-096 CMR 530(4)(C) states:

> The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions. The Department shall use the same general methods as those in section 4(D) to determine background concentrations.

For pollutants not listed by the Department, an assumed concentration of 10% of the applicable water quality criteria must be used in calculations.

06-096 CMR 530(3)(E) states, "Where it is determined through [the statistical approach referred to in USEPA's Technical Support Document for Water Quality-Based Toxics Control] that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedance of water quality criteria, appropriate water quality-based limits must be established in any licensing action."

06-096 CMR 530(3)(D) states, "Where the need for effluent limits has been determined, limits derived from acute water quality criteria must be expressed as daily maximum values. Limits derived from chronic or human health criteria must be expressed as monthly average values."

Chemical specific evaluation

As with WET test results, the Department conducted a statistical evaluation on September 12, 2017, for the most current 55 months of analytical chemistry and priority pollutant test results on file. The evaluation indicates the discharge exceeded the applicable acute AWQC threshold for total copper and exhibited reasonable potential to exceed the acute AWQC for cyanide. See **Attachment D** of this Fact Sheet for the individual test results. As a result, this permit is establishing a daily maximum water quality based mass limit of 0.07 lbs./day for copper and 0.01 lbs./day for cyanide. The limit was calculated as follows:

Chapter 530 (promulgated on October 12, 2005) §4(C), states *"The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions. The Department shall use the same general methods as those in section 4(D) to determine background concentrations. For pollutants not listed by the Department, an assumed concentration of I 0% of the applicable water quality criteria must be used in calculations*". The Department has no information on the background levels of metals in the water column in the

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

tidewaters of the Passagassawakeag River in the vicinity of the permittee's outfall. Therefore, a default background concentration of 10% of the applicable water quality criteria is being used in the calculations of this permitting action.

Chapter 530 4(E), states *"In allocating assimilative capacity for toxic pollutants, the Department shall hold a portion of the total capacity in an unallocated reserve to allow for new or changed discharges and non-point source contributions. The unallocated reserve must be reviewed and restored as necessary at intervals of not more than five years. The water quality reserve must be not less than 15% of the total assimilative quantity*".

Total Copper

Given:

Total copper acute Acute AWQC = 5.78 ug/L or 0.00578 mg/L
Acute (modified) dilution factor= 15:1
Background concentration =10% of AWQC
Permitted flow= 0.10 MGD

Find:

1) Daily maximum water quality based mass limitation.

End of Pipe (EOP) Concentration Threshold= [(Dilution Factor)(0.90)(criterion)] + (0.10)(criterion)

EOP=[(15)(0.90)(0.00578 mg/L)] + (0.1)(0.00578 mg/L) = 0.07860 mg/L or 78.6 ug/L

(0.07860 mg/L)(8.34 lbs./gal)(0.10 MGD) = **0.07 lbs./day**

This permitting action is making a best professional judgment carry forward the monitoring frequency established in the previous permitting action for total copper at 1/Year.

This space intentionally left blank

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

Total Cyanide Amenable to Chlorination

Given:

Cyanide amenable to chlorination Acute AWQC = 1 ug/L or 0.001 mg/L
Acute (modified) dilution factor= 15:1
Background concentration =10% of AWQC
Permitted flow= 0.10 MGD

Find:

1) Daily maximum water quality based mass limitation.

End of Pipe (EOP) Concentration Threshold= [(Dilution Factor)(0.90)(criterion)] + (0.10)(criterion)

EOP=(15)(0.90)(0.001 mg/L) + (0.1)(0.001 mg/L) = 0.0136 mg/L

(0.0136 mg/L)(8.34 lbs/gal)(0.10 MGD) = **0.01 lbs./day**

This permitting action is making a best professional judgment to establish the monitoring frequencies for total cyanide amenable to chlorine at 1/Year.

As for the remaining chemical specific parameters tested to date, no other parameters tested in the 53-month evaluation period exceed or has a reasonable potential to exceed applicable acute, chronic or human health AWQC. Therefore, this permitting action carrying forward screening level reporting and monitoring frequency for analytical chemistry at 1/Quarter during the screening level year pursuant to 06-096 CMR 530(2)(D)(3)(c). As with reduced WET testing, the permittee must file an annual certification with the Department pursuant to Chapter 530 §2(D)(4) and Special Condition F of this permit.

This space intentionally left blank

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

Outfall #002 – Non-contact cooling water

l. Flow – The previous permitting action established a daily maximum flow limitation of 0.075 MGD for Outfall #002 based on information provided by the permittee as being a flow that is representative of the maximum discharge flow for this outfall. This permitting action is removing Outfall #002 monitoring and reporting requirements based upon changes made at the facility that eliminated any process water inputs to Outfall #002. Any discharge from Outfall #002 is now regulated under the December 7, 2017, Multi Sector General Permit for Stormwater Discharges Associated with Industrial Activities.

A review of the DMR data for the period December 4, 2012 – October 26, 2017, indicates values have been reported as follows:

Flow (DMRs= 49)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly average	Report	0.00−0.00	0.00
Daily Maximum	0.075	0.0001−0.001	0.00034

m. Temperature: The previous permitting action established a seasonal daily maximum temperature reporting requirement from December 4, 2012 – October 26, 2017, for Outfall #002 and #001.

A review of the DMR data for the period December 4, 2012 – October 26, 2017, indicates values have been reported as follows:

Temperature (DMRs =18)

Value	Limit (ºF)	Range (ºF)	Mean (ºF)
Daily Maximum	Report	54ºF − 75ºF	69 ºF

n. pH – The previous permitting action established a technology based pH range limit of 6.0 − 8.5 standard units along with a 1/Week monitoring requirement for Outfall #002 based on a Department BPJ of BPT.

The Department reviewed DMR data for the period of December 4, 2012 – October 26, 2017, indicates values have been reported as follows:

pH (DMRs = 49)

Value	Limit (S.U.)	Minimum (S.U.)	Maximum (S.U.)
Range	6.0 – 8.5	5.06	10.4

During the monitoring period of September 24, 2017 through July 18, 2017, the permittee reported 8 excursions from the technology based pH range of 6.0 – 8.5.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY:

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

8. PUBLIC COMMENTS

Public notice of this application was made in *The Bangor Daily News* newspaper on or about March 25, 2017. 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 must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

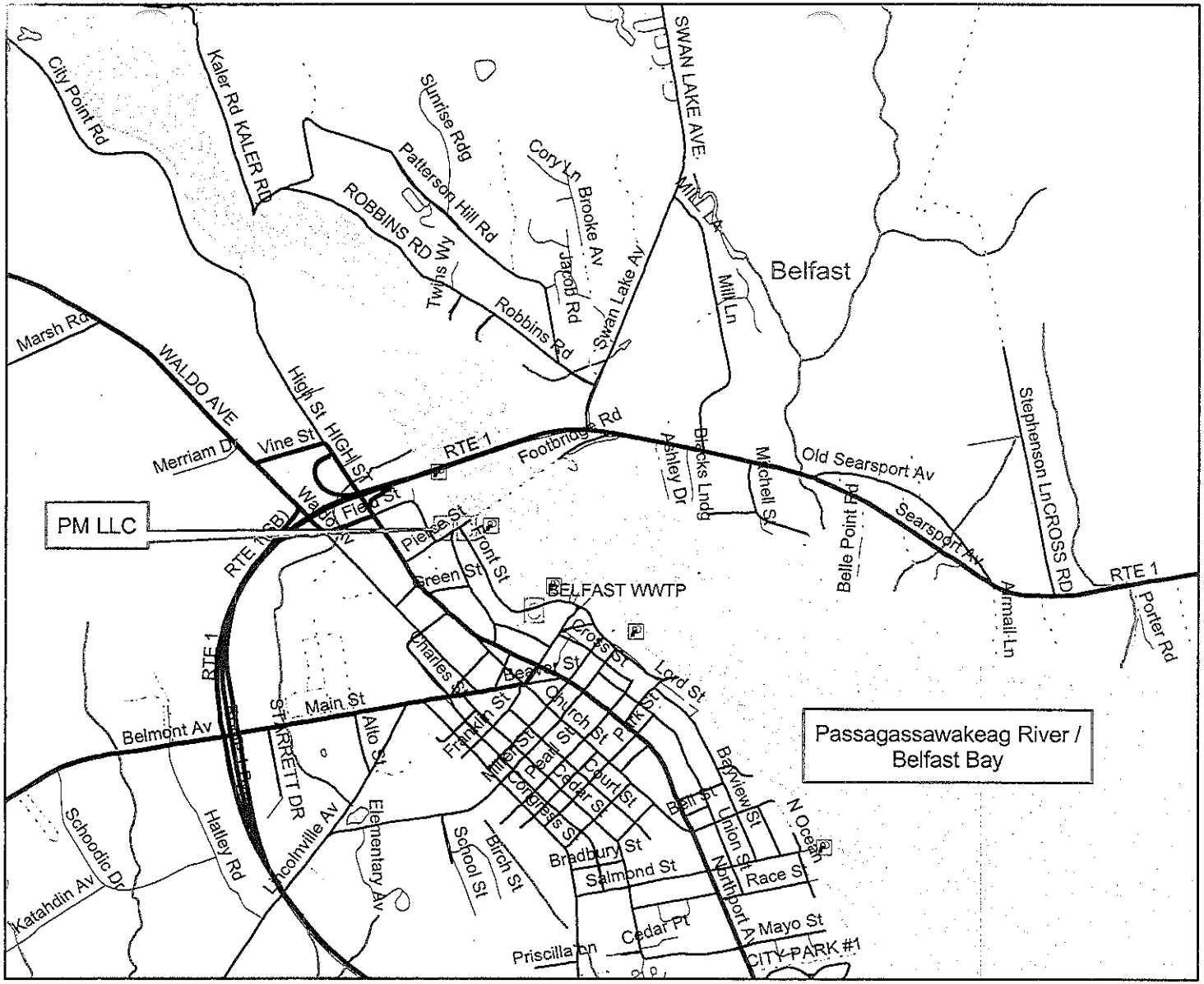
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Aaron Dumont
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 592-7161
e-mail: Aaron.A.Dumont@maine.gov

10. RESPONSE TO COMMENTS

Reserved until the end of the comment period.

ATTACHMENT A



Legend

Streams

- AA
- A
- B
- C
- Ponds and Lakes
- Wastewater_Facilities
- Wastewater_Outfalls

Roads

JURISDICTION

- Town Road
- Town Road - Summer
- Town Road - Winter
- State-aided Highway
- State Highway
- Toll Highway
- Private Road
- Reservation Road
- Seasonal Parkway
- SA
- SB
- sa
- sb
- sc

N

Miles
0 0.05 0.1 0.2 0.3 0.4

Penobscot McCrum LLC
Belfast, Maine

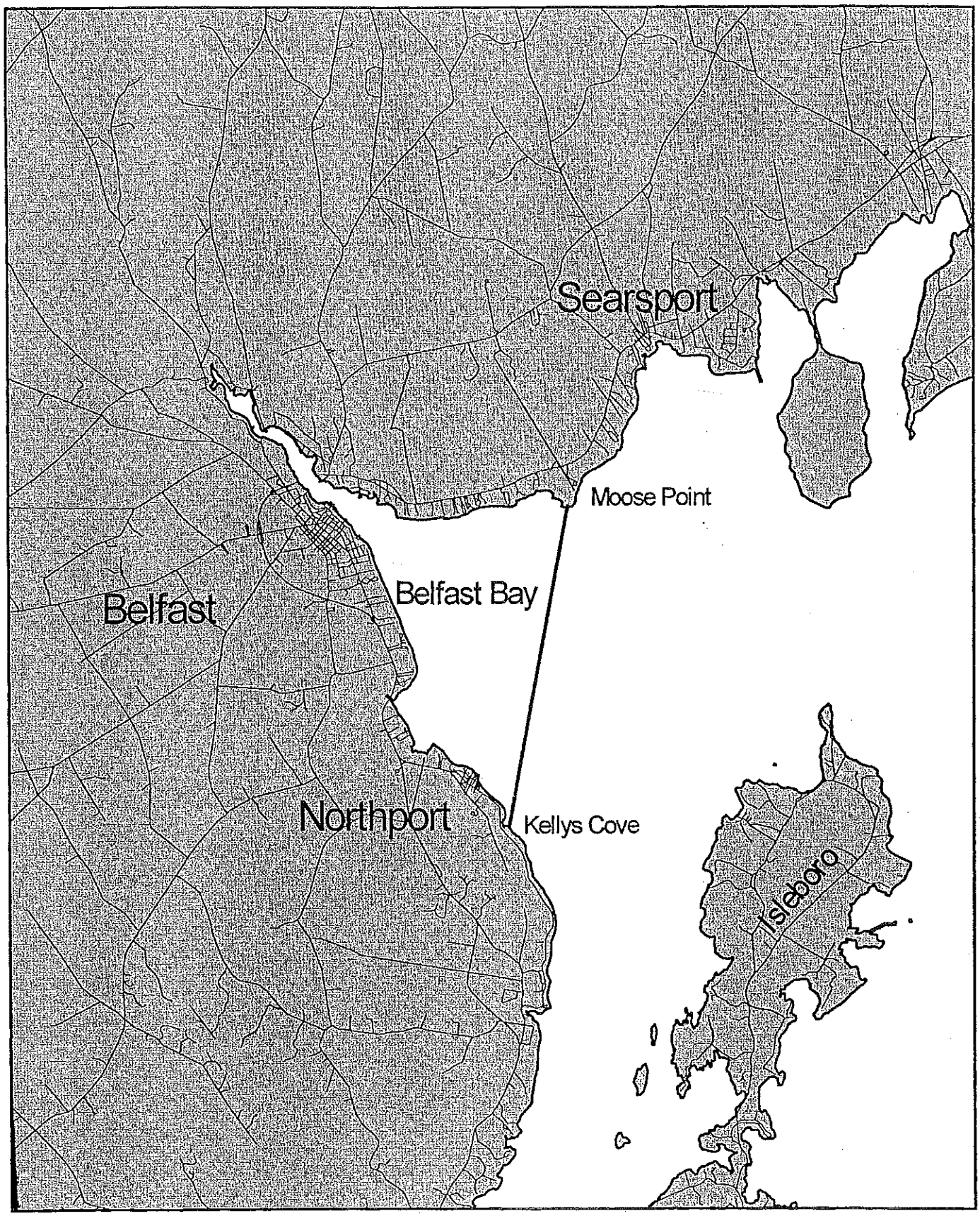
Map created by:
Bob Stratton
Division of Water Quality Management
Maine Department of Environmental Protection

DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE OF MAINE

Department of Marine Resources

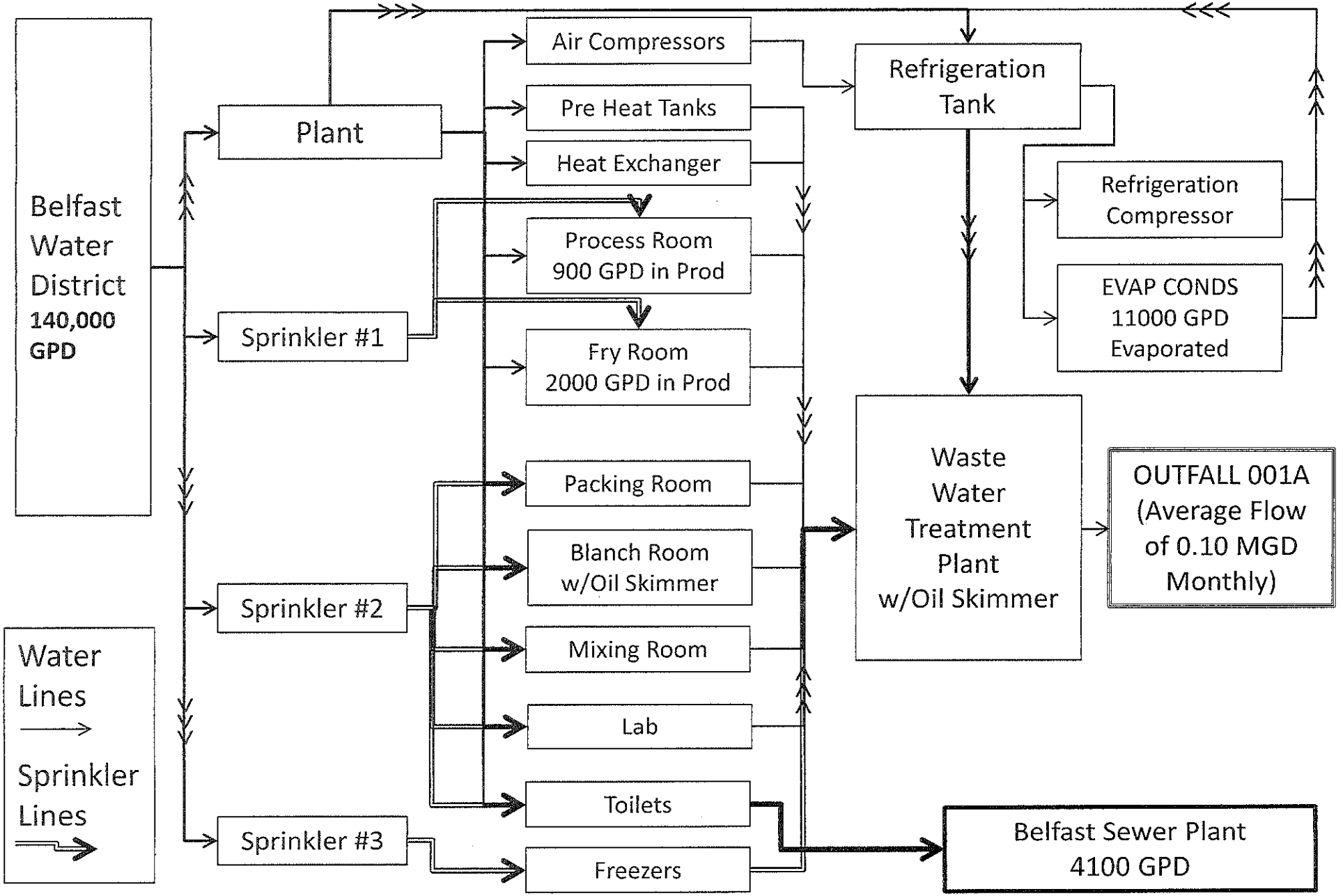
Legal Notice of Shellfish Closure Area

C 32 Belfast Bay, Belfast



ATTACHMENT B

Penobscot McCrum LLC Water Usage Schematic



ATTACHMENT C

COMBINED WET AND PRIORITY POLLUTANTS REPORT
Data entered into Toxscan for the period

01/Aug/2012 - 01/Aug/2017

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

1,1,1-TRICHLOROETHANE	**Test date**	**Result (ug/l)**	**Lsthan**
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
1,1,2,2-TETRACHLOROETHANE	**Test date**	**Result (ug/l)**	**Lsthan**
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
1,1,2-TRICHLOROETHANE	**Test date**	**Result (ug/l)**	**Lsthan**
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
1,1-DICHLOROETHANE	**Test date**	**Result (ug/l)**	**Lsthan**
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
1,1-DICHLOROETHYLENE	**Test date**	**Result (ug/l)**	**Lsthan**
	07/11/2016	5.0000	Y
	10/03/2016	3.0000	Y
1,2-(O)DICHLOROBENZENE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
1,2,4-TRICHLOROBENZENE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
1,2-DICHLOROETHANE	**Test date**	**Result (ug/l)**	**Lsthan**
	07/11/2016	5.0000	Y
	10/03/2016	3.0000	Y
1,2-DICHLOROPROPANE	**Test date**	**Result (ug/l)**	**Lsthan**
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
1,2-DIPHENYLHYDRAZINE	**Test date**	**Result (ug/l)**	**Lsthan**

COMBINED WET AND PRIORITY POLLUTANTS REPORT
Data entered into Toxscan for the period

01/Aug/2012 - 01/Aug/2017

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

1,2-DIPHENYLHYDRAZINE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	20.0000	Y
1,2-TRANS-DICHLOROETHYLENE	**Test date**	**Result (ug/l)**	**Lsthan**
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
1,3-(M)DICHLOROBENZENE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
1,3-DICHLOROPROPYLENE	**Test date**	**Result (ug/l)**	**Lsthan**
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
1,4-(P)DICHLOROBENZENE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
2,4,6-TRICHLOROPHENOL	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
2,4-DICHLOROPHENOL	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
2,4-DIMETHYLPHENOL	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
2,4-DINITROPHENOL	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	24.0000	Y
2,4-DINITROTOLUENE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
2,6-DINITROTOLUENE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
2-CHLOROETHYLVINYL ETHER	**Test date**	**Result (ug/l)**	**Lsthan**

COMBINED WET AND PRIORITY POLLUTANTS REPORT
Data entered into Toxscan for the period

01/Aug/2012 - 01/Aug/2017

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

	Test date	Result (ug/l)	Lsthan
2-CHLOROETHYLVINYL ETHER			
	07/11/2016	10.0000	Y
	10/03/2016	10.0000	Y
2-CHLORONAPHTHALENE			
	10/03/2016	4.7000	Y
2-CHLOROPHENOL			
	10/03/2016	4.7000	Y
2-NITROPHENOL			
	10/03/2016	4.7000	Y
3,3'-DICHLOROBENZIDINE			
	10/03/2016	4.7000	Y
3,4-BENZO(B)FLUORANTHENE			
	10/03/2016	4.7000	Y
4,4'-DDD			
	07/11/2016	0.0200	Y
	10/03/2016	0.0200	Y
4,4'-DDE			
	07/11/2016	0.0200	Y
	10/03/2016	0.0200	Y
4,4'-DDT			
	07/11/2016	0.0200	Y
	10/03/2016	0.0200	Y
4,6-DINITRO-O-CRESOL			
	10/03/2016	24.0000	Y
4-BROMOPHENYLPHENYL ETHER			

COMBINED WET AND PRIORITY POLLUTANTS REPORT
Data entered into Toxscan for the period

01/Aug/2012 - 01/Aug/2017

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

	Test date	Result (ug/l)	Lsthan
4-BROMOPHENYLPHENYL ETHER			
	10/03/2016	4.7000	Y
4-CHLOROPHENYL PHENYL ETHER			
	10/03/2016	4.7000	Y
4-NITROPHENOL			
	10/03/2016	19.0000	Y
A-BHC			
	07/11/2016	0.0100	Y
	10/03/2016	0.0100	Y
ACENAPHTHENE			
	10/03/2016	4.7000	Y
ACENAPHTHYLENE			
	10/03/2016	4.7000	Y
ACROLEIN			
	10/03/2016	10.0000	Y
ACRYLONITRILE			
	10/03/2016	25.0000	Y
A-ENDOSULFAN			
	07/11/2016	0.0100	Y
	10/03/2016	0.0100	Y
ALDRIN			
	07/11/2016	0.0100	Y
	10/03/2016	0.0100	Y
ALUMINUM			
	09/27/2012	60.0000	Y

COMBINED WET AND PRIORITY POLLUTANTS REPORT
Data entered into Toxscan for the period

01/Aug/2012 - 01/Aug/2017

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

	Test date	Result (ug/l)	Lsthan
ALUMINUM			
	03/25/2014	293.0000	N
	10/21/2014	60.0000	Y
	06/22/2015	60.0000	Y
	01/19/2016	228.0000	N
	04/12/2016	106.0000	N
	07/11/2016	60.0000	Y
	10/03/2016	60.0000	Y
AMMONIA			
	09/27/2012	160.0000	N
	03/25/2014	510.0000	N
	10/21/2014	420.0000	N
	06/22/2015	880.0000	N
	01/19/2016	0.1300	Y
	04/12/2016	125.0000	Y
	07/11/2016	200.0000	N
	10/03/2016	170.0000	N
ANTHRACENE			
	10/03/2016	4.7000	Y
ANTIMONY			
	07/11/2016	0.2000	Y
	10/03/2016	0.4100	N
ARSENIC			
	09/27/2012	1.0000	Y
	03/25/2014	1.8000	N
	10/21/2014	1.1000	N

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

	Test date	Result (ug/l)	Lsthan
ARSENIC			
	06/22/2015	1.1000	N
	01/19/2016	1.1000	N
	04/12/2016	1.0000	Y
	07/11/2016	1.0000	N
	10/03/2016	1.0000	Y
B-BHC	**Test date**	**Result (ug/l)**	**Lsthan**
	07/11/2016	0.0100	Y
	10/03/2016	0.0100	Y
B-ENDOSULFAN	**Test date**	**Result (ug/l)**	**Lsthan**
	07/11/2016	0.0200	Y
	10/03/2016	0.0200	Y
BENZENE	**Test date**	**Result (ug/l)**	**Lsthan**
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
BENZIDINE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	24.0000	Y
BENZO(A)ANTHRACENE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
BENZO(A)PYRENE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
BENZO(G,H,I)PERYLENE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
BENZO(K)FLUORANTHENE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
BERYLLIUM	**Test date**	**Result (ug/l)**	**Lsthan**

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

	Test date	Result (ug/l)	Lsthan
BERYLLIUM			
	07/11/2016	0.2000	Y
	10/03/2016	0.2000	Y
BIS(2-CHLOROETHOXY)METHANE			
	10/03/2016	4.7000	Y
BIS(2-CHLOROETHYL)ETHER			
	10/03/2016	4.7000	Y
BIS(2-CHLOROISOPROPYL)ETHER			
	10/03/2016	4.7000	Y
BIS(2-ETHYLHEXYL)PHTHALATE			
	10/03/2016	4.7000	Y
BROMOFORM			
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
BUTYLBENZYL PHTHALATE			
	10/03/2016	4.7000	Y
CADMIUM			
	09/27/2012	0.2000	Y
	03/25/2014	0.2000	Y
	10/21/2014	0.2000	Y
	06/22/2015	2.0000	Y
	01/19/2016	0.2000	Y
	04/12/2016	0.2000	Y
	07/11/2016	0.2000	Y
	10/03/2016	0.2000	Y
CARBON TETRACHLORIDE			

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

	Test date	Result (ug/l)	Lsthan
CARBON TETRACHLORIDE			
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
CHLORDANE			
	07/11/2016	0.0900	Y
	10/03/2016	0.0900	Y
CHLORINE			
	03/25/2014	50.0000	Y
	10/21/2014	50.0000	Y
	06/22/2015	50.0000	Y
	01/19/2016	70.0000	N
CHLOROBENZENE			
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
CHLORODIBROMOMETHANE			
	07/11/2016	5.0000	Y
	10/03/2016	3.0000	Y
CHLOROETHANE			
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
CHLOROFORM			
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
CHROMIUM			
	09/27/2012	1.4200	N
	03/25/2014	3.1100	N

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

	Test date	Result (ug/l)	Lsthan
CHROMIUM			
	10/21/2014	1.9200	N
	06/22/2015	1.2100	N
	01/19/2016	2.8100	N
	04/12/2016	1.7700	N
	07/11/2016	1.1400	N
	10/03/2016	2.6600	N
CHRYSENE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
COPPER	**Test date**	**Result (ug/l)**	**Lsthan**
	09/27/2012	36.3000	N
	03/25/2014	25.0000	N
	03/26/2014	26.9000	N
	10/21/2014	24.6000	N
	06/22/2015	9.4600	N
	01/19/2016	37.0000	N
	04/12/2016	58.4000	N
	07/11/2016	46.5000	N
	10/03/2016	47.6000	N
CYANIDE	**Test date**	**Result (ug/l)**	**Lsthan**
	09/27/2012	5.4000	N
	03/25/2014	5.0000	Y
	10/21/2014	7.0000	N
	06/22/2015	5.0000	Y
	01/19/2016	5.0000	Y
CYANIDE TOTAL	**Test date**	**Result (ug/l)**	**Lsthan**

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

	Test date	Result (ug/l)	Lsthan
CYANIDE TOTAL			
	04/12/2016	5.0000	Y
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
D-BHC			
	07/11/2016	0.0100	Y
	10/03/2016	0.0100	Y
DIBENZO(A,H)ANTHRACENE			
	10/03/2016	4.7000	Y
DICHLOROBROMOMETHANE			
	07/11/2016	5.0000	Y
	10/03/2016	3.0000	Y
DIELDRIN			
	07/11/2016	0.0200	Y
	10/03/2016	0.0200	Y
DIETHYL PHTHALATE			
	10/03/2016	4.7000	Y
DIMETHYL PHTHALATE			
	10/03/2016	4.7000	Y
DI-N-BUTYL PHTHALATE			
	10/03/2016	4.7000	Y
DI-N-OCTYL PHTHALATE			
	10/03/2016	4.7000	Y
ENDOSULFAN SULFATE			
	07/11/2016	0.0200	Y
	10/03/2016	0.0200	Y

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

	Test date	Result (ug/l)	Lsthan
ENDRIN			
	07/11/2016	0.0200	Y
	10/03/2016	0.0200	Y
ENDRIN ALDEHYDE			
	07/11/2016	0.0200	Y
	10/03/2016	0.0200	Y
ETHYLBENZENE			
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
FLUORANTHENE			
	10/03/2016	4.7000	Y
FLUORENE			
	10/03/2016	4.7000	Y
G-BHC			
	07/11/2016	0.0100	Y
	10/03/2016	0.0100	Y
HEPTACHLOR			
	07/11/2016	0.0100	Y
	10/03/2016	0.0100	Y
HEPTACHLOR EPOXIDE			
	07/11/2016	0.0100	Y
	10/03/2016	0.0100	Y
HEXACHLOROBENZENE			
	10/03/2016	4.7000	Y
HEXACHLOROBUTADIENE			
	10/03/2016	4.7000	Y

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

HEXACHLOROCYCLOPENTADIENE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
HEXACHLOROETHANE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
INDENO(1,2,3-CD)PYRENE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
ISOPHORONE	**Test date**	**Result (ug/l)**	**Lsthan**
	10/03/2016	4.7000	Y
LEAD	**Test date**	**Result (ug/l)**	**Lsthan**
	09/27/2012	0.2700	N
	03/25/2014	0.2800	N
	10/21/2014	0.2000	Y
	06/22/2015	0.2000	Y
	01/19/2016	0.2100	N
	04/12/2016	0.4000	N
	07/11/2016	0.2000	N
	10/03/2016	0.4000	N
MERCURY	**Test date**	**Result (ng/l)**	**Lsthan**
	12/10/2013	1.97	N
	05/05/2014	0.50	N
	07/23/2015	0.51	N
	03/30/2016	0.51	Y
METHYL BROMIDE	**Test date**	**Result (ug/l)**	**Lsthan**
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
METHYL CHLORIDE	**Test date**	**Result (ug/l)**	**Lsthan**

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

	Test date	Result (ug/l)	Lsthan
METHYL CHLORIDE			
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
METHYLENE CHLORIDE			
	07/11/2016	10.0000	Y
	10/03/2016	5.0000	Y
NAPHTHALENE			
	10/03/2016	4.7000	Y
NICKEL			
	09/27/2012	3.8200	N
	03/25/2014	6.0300	N
	10/21/2014	4.4300	N
	06/22/2015	3.1600	N
	01/19/2016	6.1900	N
	04/12/2016	3.0100	N
	07/11/2016	4.0600	N
	10/03/2016	2.4000	N
NITROBENZENE			
	10/03/2016	4.7000	Y
N-NITROSODIMETHYLAMINE			
	10/03/2016	4.7000	Y
N-NITROSODI-N-PROPYLAMINE			
	10/03/2016	4.7000	Y
N-NITROSODIPHENYLAMINE			
	10/03/2016	4.7000	Y
PCB-1016			

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

	Test date	Result (ug/l)	Lsthan
PCB-1016			
	07/11/2016	0.0900	Y
	10/03/2016	0.0900	Y
PCB-1221			
	07/11/2016	0.0900	Y
	10/03/2016	0.0900	Y
PCB-1232			
	07/11/2016	0.0900	Y
	10/03/2016	0.0900	Y
PCB-1242			
	07/11/2016	0.0900	Y
	10/03/2016	0.0900	Y
PCB-1248			
	07/11/2016	0.0900	Y
	10/03/2016	0.0900	Y
PCB-1254			
	07/11/2016	0.0900	Y
	10/03/2016	0.0900	Y
PCB-1260			
	07/11/2016	0.0900	Y
	10/03/2016	0.0900	Y
P-CHLORO-M-CRESOL			
	10/03/2016	4.7000	Y
PENTACHLOROPHENOL			
	10/03/2016	19.0000	Y
PHENANTHRENE			

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

	Test date	Result (ug/l)	Lsthan
PHENANTHRENE			
	10/03/2016	4.7000	Y
PHENOL			
	10/03/2016	4.7000	Y
PYRENE			
	10/03/2016	4.7000	Y
SALINITY			
	04/12/2016	0.0000	N
	07/11/2016	0.0000	N
	10/03/2016	0.0000	N
SELENIUM			
	07/11/2016	1.0000	Y
	10/03/2016	1.0000	Y
SILVER			
	09/27/2012	0.2000	Y
	03/25/2014	0.2000	Y
	10/21/2014	0.2000	Y
	06/22/2015	0.2000	Y
	01/19/2016	0.2000	Y
	04/12/2016	0.2000	Y
	07/11/2016	0.2000	Y
	10/03/2016	0.2000	Y
TETRACHLOROETHYLENE			
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
THALLIUM			

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

	Test date	Result (ug/l)	Lsthan
THALLIUM			
	07/11/2016	0.2000	Y
	10/03/2016	0.2000	Y
TOC			
	03/25/2014	33,000.0000	N
	10/21/2014	20,000.0000	N
	06/22/2015	8,100.0000	N
	01/19/2016	25,000.0000	N
TOLUENE			
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
TOXAPHENE			
	07/11/2016	0.1900	Y
	10/03/2016	0.1900	Y
TRICHLOROETHYLENE			
	07/11/2016	5.0000	Y
	10/03/2016	3.0000	Y
TSS			
	03/25/2014	1,000,000.0000	N
	10/21/2014	6,400.0000	N
	06/22/2015	4,400.0000	N
	01/19/2016	22,000.0000	N
VINYL CHLORIDE			
	07/11/2016	5.0000	Y
	10/03/2016	5.0000	Y
ZINC			

COMBINED WET AND PRIORITY POLLUTANTS REPORT
Data entered into Toxscan for the period

01/Aug/2012 - 01/Aug/2017

Facility name: **PENOBSCOT MCCRUM LLC** Permit Number: ME0023043 Effluent Limit: Acute (%) = 6.67 Chronic (%) = 0.66

CHEMICAL TEST REPORT

Showing all data - *(Mercury results are in ng/L)

ZINC

Test date	Result (ug/l)	Lsthan
09/27/2012	20.7000	N
03/25/2014	74.2000	N
10/21/2014	14.9000	N
06/22/2015	4.6000	N
01/19/2016	45.6000	N
04/12/2016	38.5000	N
07/11/2016	19.5000	N
10/03/2016	25.6000	N

WET TEST REPORT

Species	Test	Percent	Sample date	Critical %	Exception	RP
MYSID SHRIMP	A_NOEL	25	07/11/2016	6.667		
MYSID SHRIMP	A_NOEL	100	10/03/2016	6.667		
SEA URCHIN	C_NOEL	100	03/25/2014	0.662		
SEA URCHIN	C_NOEL	25	10/20/2014	0.662		
SEA URCHIN	C_NOEL	100	06/22/2015	0.662		
SEA URCHIN	C_NOEL	25	07/11/2016	0.662		
SEA URCHIN	C_NOEL	25	10/03/2016	0.662		

ATTACHMENT D

CHEMICAL EVALUATION REPORT (INDIVIDUAL)

8/28/2017

Report ID: 926

Data Date Range: 28/Aug/2012 - 28/Aug/2017

Facility: **PENOBSCOT MCCRUM LLC** Permit Number: **ME0023043**

Receiving Water: **PASSAGASSAWAKEAG RIVER** Fresh or Salt: **S** Complete Mix: **Y**

Dilution Factors: Acute: **15.0** Chronic: **151.0** Health: **453.0** Licensed Flow: **0.1**

Water Quality Assumptions: Reserve (%): **0.0** Background (%): **10.0** Temperature: **25.0**

Hardness: **20.0** PH: **7.0** Salinity: **20.0**

Historical Average Date: **28/Aug/2017**

Specific pollutants with reasonable potential: Number of parameters found = 2

Pollutant: **COPPER** Reporting Limit: **3.0** Sample Number: **10**

Coefficient of Variation: **0.5** Reasonable Potential Factor: **1.6**

Historical Average: **N/A** RP Historical Average: **N/A**

Facility Allocation:	Acute	Chronic	Health
Pounds per day	0.04306910	N/A	N/A
Exceedence ug/L	51.64	---	---
RP ug/L	32.28	---	---

***** INDIVIDUAL RESULTS *****

					Exceedence or Reasonable Potential and Basis		
Flag	**Daily Flow**	**Date**	**Concentration**	**Mass**	**Acute**	**Chronic**	**Health**
IN	0.0530	09/27/2012	36.3	0.01605	---	---	---
IN	0.0048	03/25/2014	25	0.001	---	---	---
IN	0.0058	03/26/2014	26.9	0.0013	---	---	---
IN	0.0546	10/21/2014	24.6	0.01119	---	---	---
IN	0.0646	06/22/2015	9.46	0.0051	---	---	---
IN	0.0539	01/19/2016	37	0.01663	---	---	---
IN	0.0648	04/12/2016	58.4	0.03156	Y	---	---
IN	0.0445	07/11/2016	46.5	0.01726	---	---	---
IN	0.0408	10/03/2016	47.6	0.0162	---	---	---
IN	0.0638	06/27/2017	11	0.00585	---	---	---

Pollutant: **CYANIDE** Reporting Limit: **5.0** Sample Number: **5**

Coefficient of Variation: **0.6** Reasonable Potential Factor: **2.3**

Historical Average: **N/A** RP Historical Average: **N/A**

Facility Allocation:	Acute	Chronic	Health
Pounds per day	0.00763440	N/A	N/A
Exceedence ug/L	9.15	---	---
RP ug/L	3.98	---	---

***** INDIVIDUAL RESULTS *****

					Exceedence or Reasonable Potential and Basis		
Flag	**Daily Flow**	**Date**	**Concentration**	**Mass**	**Acute**	**Chronic**	**Health**
IN	0.0530	09/27/2012	5.4	0.00239	---	---	---
IN	0.0048	03/25/2014	<5	---	---	---	---
IN	0.0546	10/21/2014	7	0.00318	---	---	---
IN	0.0646	06/22/2015	<5	---	---	---	---
IN	1.5370	01/19/2016	<5	---	---	---	---