STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JANET T. MILLS
GOVERNOR

GERALD D. REID
COMMISSIONER

March 26, 2020

Mr. Steven Craig
28 Pierce St.
Belfast, ME. 04915
scraig@mccrum.com

Sent via electronic mail
Delivery confirmation requested

RE: *Maine Pollutant Discharge Elimination System (MEPDES) Permit #MEU508272*
Maine Waste Discharge License (WDL) Application #W008272-5P-A-N
Proposed Draft MEPDES Permit Renewal

Dear Mr. Craig,

Attached is a proposed draft 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 license and its special and standard conditions. 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 license from various state and federal agencies and from any other parties who have notified the Department of their interest in this matter.

The comment period begins on Thursday, March 26, 2020 and ends on Monday, April 27, 2020. All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business Monday, April 27, 2020. Failure to submit comments in a timely fashion will result in the proposed draft license 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
Cindy.L.Dionne@maine.gov

If you have any questions regarding the matter, please feel free to contact me.

Sincerely,

Cindy L. Dionne
Division of Water Quality Management
Bureau of Water Quality
ph: 207-287-7823

Enc.

ec: John Hopek, DEP
Pamela Parker, DEP
Sean Bernard, DEP
Lori Mitchell, DEP
Fred Corey, Aroostook Band of Micmac Indians
Marelyn Vega, USEPA
Richard Carvalho, USEPA
Sharri Venno, Houlton Band of Maliseet Indians
Kirk Mohney, Maine Historic Preservation Commission

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

DEPARTMENT ORDER

IN THE MATTER OF

PENOBSCOT MCCRUM, LLC.	)	PROTECTION AND IMPROVEMENT
WASHBURN, AROOSTOOK COUNTY, MAINE	)	OF WATERS
SURFACE WASTEWATER DISPOSAL SYSTEM	)	
MEU508272	)	WASTE DISCHARGE LICENSE
W008272-5P-A-N **APPROVAL**	)	**NEW**

Pursuant to *Conditions of licenses*, 38 M.R.S. § 414-A, and applicable regulations, the Department of Environmental Protection (Department) has considered the application of PENOBSCOT MCCRUM, LLC. (McCrum/licensee), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On April 30, 2019, the Department accepted as complete, a new application for the discharge of potato processing wastewater from McCrum. The Department assigned Waste Discharge License (WDL) #W008272-5P-A-N/Integrated Compliance Information System (ICIS) #MEU508272 to the application. The application seeks authorization to discharge a maximum of 2,059,028 gallons per week via spray irrigation between May 15 and October 31, annually, as well as discharge a maximum of 32 million gallons via snowmaking between December 1 and March 31, annually to groundwater, Class GW-A. The discharge consists of potato processing wastewater after treatment via anaerobic digestion followed by aeration in an initial lagoon before storage in a storage lagoon. This license also acknowledges the discharge of an unspecified quantity of potato wash water (wastewater with no added chemicals or detergents) to potato wash water pits on site. The processing plant, the wastewater treatment system, and disposal systems are all located in Washburn, Maine.

LICENSE SUMMARY

This licensing action is establishing narrative as well as numeric standards for the monitoring of process wastewater in the storage lagoon, spray and snow irrigation systems as well as ambient conditions in the associated on-site monitoring wells.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated March 26, 2020, and subject to the Conditions listed below, the Department makes the following conclusions:

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

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

3. The provisions of the State's antidegradation policy, *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).

ACTION

THEREFORE, the Department APPROVES the above noted application of PENOBSCOT MCCRUM, LLC. to discharge a maximum of 2,059,028 gallons per week via spray irrigation between May 15 and October 31, annually, as well as discharge a maximum of 32 million gallons via snowmaking between December 1 and March 31, annually, of potato processing wastewater, as well as an unspecified quantity of potato wash water to on-site pits to groundwater, Class GW-A in Washburn, Maine SUBJECT TO THE FOLLOWING CONDITIONS, and all applicable standards and regulations including:

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

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

3. This license 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 license, the authorization to discharge and the terms and conditions of this license 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 June 9, 2018)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS _____ DAY OF _____ 2020.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____
GERALD D. REID, Commissioner

Date of initial receipt of application: April 26, 2019

Date of application acceptance: April 30, 2019

Date filed with Board of Environmental Protection _____

This Order prepared by Cindy L. Dionne, BUREAU OF WATER QUALITY

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. The licensee is authorized to operate a surface wastewater treatment and disposal system. The **STORAGE LAGOON EFFLUENT (1) (OUTFALL #001)** must be limited and monitored as specified below.

Effluent Characteristic	Discharge Limitations		Minimum Monitoring Requirements	
	Daily Minimum	**Daily Maximum**	**Measurement Frequency**	**Sample Type**
Freeboard (3) *[82564]*	2.0 feet *[27]*	---	1/Week *[01/07]*	Measure *[MS]*
Total Suspended Solids (2) *[00530]*	---	100 mg/L *[19]*	1/Week *[01/07]*	Grab *[GR]*
Biochemical Oxygen Demand (2) *[00310]*	---	100 mg/L *[19]*	1/Week *[01/07]*	Grab *[GR]*
Nitrate-Nitrogen (2,3) *[00620]*	---	Report mg/L *[19]*	1/Week *[01/07]*	Grab *[GR]*
pH (2,3) *[00400]*	---	Report SU *[12]*	1/Week *[01/07]*	Grab *[GR]*
Metals (Total): Arsenic, Cadmium, Chromium, Copper, Lead, Nickel and Zinc (4) *[01002, 01027, 01034, 01042, 01051, 01067, 01092]*		Report (µg/L) *[28]*	1/5 Years	Grab *[GR]*

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

See pages 8 & 9 for applicable footnotes.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

2. The **SPRAY IRRIGATION FIELD** [(1)] must be limited (**May 15th – October 31st**) and monitored as specified below:

SF#1 (66.36 acres) abuts South Wade Road and Castle Hill Road

	Monthly Total	Weekly Maximum	Daily Maximum	Measurement Frequency	Sample Type
Application Rate [(5)] *[51125]*	---	31,028 gallons/acre *[8B]*	---	1/Week *[01/07]*	Calculate *[CA]*
Flow - Total Gallons *[51500]*	Report (Gallons) *[57]*	---	---	1/Month *[01/30]*	Calculate *[CA]*

The licensee is not authorized to utilize SF-1 until sampling of monitoring wells MW01, MW02, MW03, MW04, MW05, MW06, MW07, MW08, MW09, MW10, MW11 have been sampled to determine background/baseline ground water quality. See Special Condition A(4) for list of parameters to be sampled.

See pages 8 & 9 for applicable footnotes.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

3. The **SNOWMAKING FIELD** [(1)] must be limited (**December 1st – March 31st**) and monitored as specified below:
   SM#1 (65 acres) abuts Parsons Road.

	Annual Total[(6)]	Monthly Total	Weekly Maximum	Daily Maximum	Measurement Frequency	Sample Type
Application Rate *[51128]*	---	Report (gallons) *[8D]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Application Rate [(6)] *[51128]*	32 Million Gallons *[8E]*	---	---	---	1/Year *[01/YR]*	Calculate *[CA]*

The licensee is not authorized to utilize SM-1 until sampling of monitoring wells MW01, MW02, MW03, MW04, MW05, MW06, MW07, MW08, MW09, MW10, MW11 have been sampled to determine background/baseline ground water quality. See Special Condition A(4) for list of parameters to be sampled.

See pages 8 & 9 for applicable footnotes.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS

4. **GROUND WATER MONITORING WELLS** [1] (MW01, MW02, MW03, MW04, MW05, MW06, MW07, MW08, MW09, MW10, and MW11) must be limited and monitored as stated below:

	Daily Maximum	Measurement Frequency	Sample Type
Depth to Water Level Below Landsurface *[72019]*	Report (feet) [7] *[27]*	3/Year [8] *[03/YR]*	Measure *[MS]*
Nitrate-Nitrogen *[00620]*	10 mg/L *[19]*	3/Year [8] *[03/YR]*	Grab *[GR]*
Specific Conductance [9, 10] *[00095]*	Report (umhos/cm) *[11]*	3/Year [8] *[03/YR]*	Grab *[GR]*
Temperature [9] *[00011]*	Report (°C) *[15]*	3/Year [8] *[03/YR]*	Grab *[GR]*
pH (Standard Units) [9] *[00400]*	Report (S.U.) *[12]*	3/Year [8] *[03/YR]*	Grab *[GR]*
Total Suspended Solids *[00530]*	Report (mg/L) *[19]*	3/Year [8] *[03/YR]*	Grab *[GR]*
Metals (Total): Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel and Zinc *[01002, 01027, 01034, 01042, 01051, 71900, 01067, 01092]*	Report µg/L *[28]*	1/5 Years [3] *[02/5Y]*	Grab *[GR]*

See pages 8 & 9 for applicable footnotes.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

FOOTNOTES*:*

1. **Sampling** – Any change in sampling location must be approved by the Department in writing. The licensee must conduct 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 sent to a publicly owned treatment works (POTW) 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 (effective December 19, 2018). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of 10 − 144 CMR 263. If the licensee monitors any pollutant more frequently than required by the license using test procedures approved under 40 CFR Part 136 or as specified in this license, the results of this monitoring must be included in the calculation and reporting of the data submitted in the discharge monitoring report (DMR).

   Storage lagoon effluent sampling must be conducted at a point in the operations prior to being pumped to the spray field(s) or snowmaking field and must be representative of what is being applied to the fields.

2. **Lagoon Effluent Sampling** − The permittee is not required to test for these parameters during a month where no wastewater was disposed of via the disposal systems.

3. **Lagoon Freeboard** − Storage lagoon freeboard must be reported as the mathematical difference between the water level in the lagoon and the lowest elevation point in the lagoon berm. It must be measured weekly to the nearest one tenth ($1/10^{th}$) of a foot, with the minimum monthly value reported on the DMR. If site conditions prevent safe or accurate measurements, the licensee must estimate this value and indicate this to the Department.

4. **Screening Level Metals Testing** – The licensee must conduct one round of testing for the specified metals **during the fourth calendar quarter of the fourth year of the license**, unless otherwise specified by the Department.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

FOOTNOTES*:*

5. **Weekly Maximum for Spray Irrigation** – "Weekly" is defined as Sunday through Saturday. The licensee must measure the flow of wastewater to the irrigation area by the use of a flow measuring device that is checked for calibration at least once per calendar year. For Discharge Monitoring Report (DMR) reporting purposes, the licensee must report the highest weekly application rate for the month in the applicable box on the form. Compliance with weekly reporting requirements must be reported for the month in which the calendar week ends.

6. **Annual Limit** – The snowmaking field is subject to an annual snowmaking application limit of 32 million gallons of wastewater between December 1st and March 31st each year and must be reported in April of each year. In addition to the amount of wastewater applied per month via spray irrigation and snowmaking respectively, the licensee must report the annual cumulative amount of effluent snowmaking applied to date.

7. **Depth to Water Level** − Depth to water level must be measured to the nearest one-tenth ($1/10^{th}$) of a foot as referenced from the surface of the ground at the base of the monitoring well.

8. **Groundwater Monitoring Period** − Groundwater monitoring wells must be sampled during the months of **May, August and October** of each year, unless otherwise specified by the Department.

9. **Field Measurements** – Specific conductance (calibrated to 25.0° C), temperature, and pH are considered to be "field" parameters and are to be measured in the field via instrumentation. The licensee is required to test for these parameters whether wastewater was disposed of via the spray-irrigation system or not.

10. **Specific Conductance** – Temperature must be calibrated to 25.0 °C. Specific Conductance values indicating a statistically significant trend upwards or sudden spikes from previous levels may necessitate the need for additional groundwater testing requirements to determine causes and effects as related to spray irrigation/drip dispersal activities.

SPECIAL CONDITIONS

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent must not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the use designated by the classification of the groundwater.

2. The effluent must not lower the quality of any classified body of groundwater below such classification, (groundwater is a classified body of water under 38 M.R.S. § 465-C) 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 the management responsibility over the treatment facility must hold a **Grade IV** Wastewater Operator certificate or higher (or Registered Maine Professional Engineer) pursuant to *Sewage Treatment Operators* 32 M.R.S. §4171- 4182 *et seq*. 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 licensee may engage the services of the contract operator.

D. MONITORING AND REPORTING

Electronic Discharge Monitoring Reports (DMRs) submitted using the 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.

SPECIAL CONDITIONS

D. MONITORING AND REPORTING (cont'd)

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
1235 Central Drive-Skyway Park
Presque Isle, Maine 04769

E. AUTHORIZED DISCHARGES

The licensee is authorized to discharge only in accordance with: 1) the licensee's General Application for Waste Discharge License, accepted for processing on April 30, 2019; 2) the terms and conditions of this license; and 3) only to the existing spray-irrigation and snowmaking fields (Fields SF-1 and SM-1). Discharges of wastewater from any other point source(s) are not authorized under this license and must be reported in accordance with Standard Condition D(1)(F), *Twenty-four hour reporting*, of this license.

F. NOTIFICATION REQUIREMENT

In accordance with Standard Condition D, the licensee must notify the Department of the following:

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

2. For the purposes of this section, notice regarding substantial change must include information on:

    a. the quality and quantity of wastewater introduced to the wastewater collection and treatment system; and
    b. any anticipated impact caused by the change in the quantity or quality of the wastewater to be discharged from the treatment system.

SPECIAL CONDITIONS

G. GENERAL OPERATIONAL CONSTRAINTS

1. All wastewater must receive biological treatment through a properly designed, operated and maintained treatment system prior to disposal via spray irrigation or snow making.

2. The surface wastewater disposal facilities must be effectively maintained and operated at all times so that there is no discharge to surface waters, nor any contamination of groundwater which will render it unsatisfactory for use as a public drinking water supply.

3. The surface wastewater disposal system must not cause the lowering of the quality of the groundwater, as measured in the groundwater monitoring wells specified by this license, below the State Primary and Secondary Drinking Water Standards specified in the Maine State Drinking Water Regulations pursuant to *Drinking Water Regulations,* 22 M.R.S. §2611.

   In the event that groundwater monitoring results indicate lowering of the existing groundwater quality, the licensee may be required to take immediate remedial action(s), which may include, but not be limited to, adjustment of the irrigation schedule or application rates, a reduction of the pollutant loading, groundwater remediation, or ceasing operation of the system until the groundwater attains applicable standards.

4. The licensee must maintain a file on the location of all system components and relevant features. Each component must be mapped and field located sufficiently to allow adequate inspections and monitoring by both the licensee and the Department.

5. System components including collection pipes, tanks, manholes, pumps, pumping stations, spray disposal fields, and monitoring wells must be identified and referenced by a unique system identifier in all logs and reports.

6. The licensee must at all times maintain in good working order and operate at maximum efficiency all wastewater collection, treatment and/or control facilities. Within one hour after start-up of the spray-irrigation system, the licensee must inspect the spray-irrigation site or have other means to check the system for leakage in the piping system and determine if individual sprayheads and pump(s) are functioning as designed and verify that application rates are appropriate for the existing site conditions. The procedures used to determine the system is functioning as designed must be described in the facility's O&M manual. Should significant malfunctions or leaks be detected, the licensee must shut down the malfunctioning/leaking sections of the spray system and make necessary repairs before resuming operation. The licensee must cease irrigation if runoff is observed outside the designated boundaries of the spray field(s). The licensee must field calibrate equipment to ensure proper and uniform spray applications when operating. Calibration involves collecting and measuring application rate at different locations within the application area. A description of the calibration procedures and a log sheet that have been used for recording calibration results must be included as part of the Operations & Maintenance manual.

SPECIAL CONDITIONS

G. GENERAL OPERATIONAL CONSTRAINTS (cont'd)

7. The licensee must maintain a daily log of all spray irrigation activities which records the date, weather, rainfall, areas irrigated, volume sprayed (gallons), application rates (daily and weekly), and other relevant observations/comments from daily inspections. The log must be in accordance with the general format of the "Monthly Operations Log" provided as **Attachment A** of this license, or other similar format approved by the Department. Weekly application rates must be reported in accordance with the general format of the "Spray Application Report by Week" provided as **Attachment B** of this license or other format as approved by the Department. The Monthly Operations Log, and Spray Application Report by Week, for each month must be submitted to the Department as an attachment to the monthly Discharge Monitoring Reports (DMRs) in a format approved by the Department. Copies will also be maintained on site for Department review and for license operation maintenance purposes.

H. SPRAY IRRIGATION OPERATIONAL CONSTRAINTS, LOGS, AND REPORTS

1. Suitable vegetative cover must be maintained. Wastewater must not be applied to areas without sufficient vegetation or ground cover as to prevent erosion or surface water runoff outside the designated boundaries of the spray fields.

2. At least 10 inches of separation from the ground surface to the groundwater table must be present prior to spray irrigating.

3. No wastewater must be spray irrigated following a rainfall accumulation exceeding 1.0 inches within the previous 24-hour period. A rain gauge must be located on site to monitor daily precipitation. The licensee must also manage application rates by taking into consideration the forecast for rain events in the 48-hour period in the future.

4. No wastewater must be spray irrigated where there is snow present on the surface of the ground or there is any evidence of frost or frozen ground within the upper 10 inches of the soil profile.

5. No traffic or equipment must be allowed in the spray-irrigation field(s) except where installation occurs or where normal operations and maintenance are performed (this must include forest management operations).

6. At least 48 hours prior to the commencement of spray irrigation for the season, the licensee must notify the Department's compliance inspector in writing that they have verified that soil conditions are appropriate (absence of frozen ground, soil conditions, moisture, etc.) for spray irrigation.

SPECIAL CONDITIONS

H. SPRAY IRRIGATION OPERATIONAL CONSTRAINTS, LOGS, AND REPORTS

7. The licensee must install the equivalent of one groundwater level inspection well per spray field to verify that 10 inches of separation from the ground surface to the observed groundwater level is present prior to spraying. Depths to groundwater must be recorded in accordance with the general format of *"Monthly Operations Log"* provided as **Attachment A** of this license or other format as approved by the Department.

I. SNOWMAKING OPERATIONAL CONSTRAINTS

1. Snow from effluent will only be made when conditions are conducive to snowmaking or ice making. When conditions are such that the effluent from the snow guns results in a liquid being sprayed on the site, the operator will cease snowmaking operations until proper conditions exist. Snowmaking will be interrupted to prevent runoff occurring off the site.

2. The licensee must inspect all snowmaking equipment, effluent pipes and pipelines periodically for leaks and other maintenance requirements. Upon the detection of a leak, the section needing repair must be shut down immediately and the necessary repairs or replacements made prior to startup.

J. VEGETATION MANAGEMENT

1. The licensee must remove grasses and other vegetation such as shrubs and trees if necessary so as not to impair the operation of the spray-irrigation system, to ensure uniform distribution of wastewater over the desired application area and to optimize nutrient uptake and removal.

2. The vegetative buffer zones along the perimeter of the site must be maintained to maximize vegetation and forest canopy density in order to minimize off-site drift of spray.

K. LAGOON MAINTENANCE

The banks of the lagoon must be inspected periodically during the operating season (at least two times per year) and properly maintained at all times. There must be no overflow through or over the banks. Any signs of leaks, destructive animal activity or soil erosion of the banks must be repaired immediately.

2. The banks of the lagoon must be maintained to keep them free of woody vegetation and other vegetation that may be detrimental to the integrity of the bank and/or lagoon liner. The waters within the lagoons must be kept free of all vegetation (i.e. grasses, reeds, cattails, etc) that hinders the operation of the lagoon.

SPECIAL CONDITIONS

K. LAGOON MAINTENANCE (cont'd)

3. The licensee must maintain the lagoon freeboard at a level no higher than design levels or two feet, whichever is greater.

4. The treatment and storage lagoon must be dredged as necessary to maintain the proper operating depths that will provide best practicable treatment of the wastewater. All material removed from the lagoon must be properly disposed of in accordance with all applicable State and Federal rules and regulations.

L. INSPECTIONS AND MAINTENANCE

The licensee must periodically inspect all system components to ensure the facility is being operated and maintained in accordance with the design of the system. Maintenance logs must be maintained for each major system component including pumps, pump stations, septic tanks, lagoons, spray apparatus, and pipes. At a minimum, the logs must include the unique identifier [see Special Condition G(5)], the date of maintenance performed, name(s) of person(s) performing the maintenance, and other relevant system observations.

M. GROUND WATER MONITORING WELLS

1. All monitoring wells must be equipped with a cap and lock to limit access and must be maintained in a secured state at all times. The integrity of the monitoring wells must also be verified annually in order to ensure representative samples of groundwater quality.

2. The Department reserves the right to require increasing the depth and or relocating any of the groundwater monitoring wells if the well is perennially dry or is determined not to be representative of groundwater conditions.

N. OPERATIONS AND MAINTENANCE (O & M) PLAN AND SITE PLAN(S)

This facility must have a current written comprehensive O&M Plan. The plan must provide a systematic approach by which the licensee must at all times, properly operate and maintain all facilities and the systems of treatment and control (and related appurtenances) which are installed or used by the licensee to achieve compliance with the conditions of this license. Of particular importance is the management of the spray application sites such that the spray sites are given ample periods of rest to prevent over application.

By December 31 of each year, or within 90 days of any process changes or minor equipment upgrades, the licensee 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 the Department personnel upon request.

SPECIAL CONDITIONS

N. OPERATIONS AND MAINTENANCE (O & M) PLAN AND SITE PLAN(S) (cont'd)

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

O. COMMENCEMENT OF OPERATIONS

The permittee or new owner/operator must meet with the Department's permitting and compliance inspection staff **at a minimum of thirty (30) days prior to commencing production/operations** at the facility to review the applicability of the permit limitations, monitoring requirements, and reporting requirements. Should the Department determine that the proposed production/operations are significantly different from what was presented in past application materials or subsequently revised and included in permitting actions; the Department may require the applicable party to modify this permit or to file an application for a new permit. In addition, pursuant to Department Rule, Chapter 2 Rules *Concerning the Processing of Applications and Other Administrative Matters*, Section 21*, License Renewals, Amendments and Transfers*, Sub-section C, *Transfers*, "a transferee must make application to the Department no later than two (2) weeks after transfer of ownership or entering into a licensee agreement to conduct business or said property. Pending determination on the application for approval of transfer the transferee shall abide by all of the conditions of this permit, and is jointly or severally liable with the permittee for any violation of the terms and conditions thereof."

P. REOPENING OF LICENSE FOR MODIFICATIONS

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 licensing action, new site specific information, or any other pertinent test results or information obtained during the term of this license, the Department may, at any time and with notice to the licensee, modify this license 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.

Q. SEVERABILITY

In the event that any provision(s), or part thereof, of this license is declared to be unlawful by a reviewing court, the remainder of the license 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.

CONTENTS

A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

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

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

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

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

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

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

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

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

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

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

5. Bypasses.

(a) Definitions.

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

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

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

(c) Notice.

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

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

(d) Prohibition of bypass.

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

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

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

6. Upsets.

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

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

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

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

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

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

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

(c) Records of monitoring information shall include:

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

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

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

D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

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

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

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

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

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

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

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

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

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

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

(f) Twenty-four hour reporting.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5. Publicly owned treatment works.

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

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

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

E. OTHER REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ATTACHMENT A

Monthly Operations Log

Penobscot McCrum, LLC Washburn #W008272-5P-A-N / #MEU508272

(Month/Year) (_____/_____) Weekly Application Rate: _____ gallons/week

	A	B	C	D	E	G	H
Day	Date	Precipitation Previous 24 hours (inches)	Air Temp (℉)	Weather	Wind-Direction/ Speed (mph)	Total Gallons Pumped	Name of Field(s) Used
	1						
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						
	10						
	11						
	12						
	13						
	14						
	15						
	16						
	17						
	18						
	19						
	20						
	21						
	22						
	23						
	24						
	25						
	26						
	27						
	28						
	29						
	30						
	31						
Monthly Total =							

ATTACHMENT B

Penobscot McCrum, LLC Washburn **Spray Application Report by Week** **(Month/Year) (_____/_____)**

W008272-5P-A-N / #MEU508272 Weekly Application Rate _____ gallons/week

Field Name/#	Effective Spray Area (Acres, when all used)	Weekly Limit (Gallons per acre)	Actual Spray Application Rates (Gallons per acre)					Number of Exceptions to Weekly Limit	Monthly Average
			Week 1	Week 2	Week 3	Week 4	Week 5		
Spray Field SF#1	66.36	31,028							
Snow Field SM#1	65	Annual Limit of 32 MGD							

Note: 1 acre-inch is equivalent to 27,150 gallons of liquid
27,150 gallons per acre is equivalent to 1.0 inch

Total Number of Exceptions

A spray-field's weekly application rate is the total gallons sprayed (Sunday through Saturday) divided by the size of the spray-field in acres or the size in acres of that portion of the spray field utilized.

Signature of Responsible Official: _____, Date _____

MAINE WASTE DISCHARGE LICENSE

Proposed Draft FACT SHEET

Date: **March 26, 2020**

ICIS NUMBER: **MEU508272**
LICENSE NUMBER: **W008272-5P-A-N**

NAME AND ADDRESS OF APPLICANT:

PENOBSCOT MCCRUM LLC
28 Pierce St.
Belfast, ME. 04915

COUNTY: **Aroostook County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

2348 Parsons Road
Washburn, Maine 04786

RECEIVING WATER/CLASSIFICATION: **Ground Water/Class GW-A**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Steven Craig**
(207) 338-4360
e-mail: scraig@mccrum.com

1. APPLICATION SUMMARY

a. Application: On April 30, 2019, the Department of Environmental Protection (Department) accepted as complete, an application for the discharge of potato processing wastewater from Penobscot McCrum, LLC (McCrum). The Department assigned Waste Discharge License (WDL) #W008272-5P-A-N/Maine Compliance Tracking #MEU508272 to the application. The application seeks authorization to discharge a maximum of 2,059,028 gallons per week via spray irrigation between May 15 and October 31, annually, as well as discharge a maximum of 32 million gallons via snowmaking between December 1 and March 31, annually to groundwater, Class GW-A. The discharge consists of potato processing wastewater after treatment in a storage lagoon. The processing plant, the wastewater treatment system, and disposal systems are all located in Washburn, Maine.

1. APPLICATION SUMMARY (cont'd)

a. Source Description: The permittee proposes to process potatoes by baking, blanching and frying them into frozen food 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. The following is an excerpt from McCrum's application:

> "Operations at the facility will generate two distinct wastewater streams: process wastewater (from cleaning operations, food processing operations, boiler blowdown and the like) and sanitary wastewater (from bathrooms within the facility). The process wastewater is proposed to be disposed of through seasonal spray irrigation and snow making. Sanitary wastewater is proposed to be disposed of through a subsurface disposal system (septic system)."

b. Wastewater Treatment: The following is an excerpt from the McCrum application:

> "Process treatment and disposal requirements at full facility operation have been projected at 225,000 gallons per day (gpd). The facility is proposed for operation 24 hours per day and 6 days per week.
>
> Screened, temperature-adjusted wastewater will be pumped from an influent equalization tank to the ADI-BVF® reactor. The 1.7 MG BVF® reactor acts as a low-rate up-flow anaerobic sludge blanket process. Wastewater enters the reactor via the specially-designed piping network beneath the sludge bed. The recycle pumps are used to mix either reactor supernatant or settled sludge with the incoming raw wastewater. As wastewater enters the sludge bed, anaerobic microorganisms digest the degradeable organics, converting the majority of the influent COD load to biogas and a minimal amount of biological sludge. BVF® reactor effluent flow in BOD and TSS will be discharged to the effluent storage lagoon.
>
> Effluent from the anaerobic reactor will be after treatment via anaerobic digestion followed by aeration in an initial lagoon before storage in a storage lagoon. The storage lagoon has been sized to accommodate two months of flow, based on 225,000 gpd and 6 days per week operation, as well as a "safety factor" of 25 percent and an allowance for precipitation that would fall within the limits of the lagoon."

See **Attachment A** of this Fact Sheet for a process schematic of the facility.

1. APPLICATION SUMMARY (cont'd)

Spray Irrigation – The spray irrigation crop will be contained within a single 66.36-acre spray field. The irrigation system will be a center-pivot style and will be designed to evenly distribute the wastewater over the entire crop area. The applicant plans to grow alfalfa and/or timothy within the effluent disposal area, and the crop will be harvested a minimum of two times per growing season by the applicant.

The following is an excerpt from a letter from County Site Evaluation, who analyzed the on-site soils:

> "It is noted the site has a history of alternations such as bulldozing, filling/grading, burn piles, and other alterations that are reflected in a number of subsurface explorations. Along the easterly portion of the site (at Tp 1-5) we found deep well drained to moderately well drained conditions with evidence of filling and grading. Along the westerly portion of the site (at Tp 6-10) we found more variety of the drainage class and grade elevations."

Snowmaking – Snowmaking operations will be contained within a single 65-acre field. The following is an excerpt from the McCrum application:

> "The waste snow making crop will be contained within a single 65-acre field. The snow making system will utilize conventional snowmaking technology and equipment to make snow from treated wastewater effluent. The snow making system will be a tower type system as discussed in more detail below.
>
> Effluent will be pumped from the storage lagoon to the land application (snowmaking or spray irrigation) sites, depending on the season.
>
> Spray Irrigation: May 15 through October 31
> Storage: (Autumn) October 31 through December 1
> Snowmaking: December 1 through March 31
> Storage (Spring) March 31 through May 15

See **Attachment B** of this Fact Sheet for a site map that depicts the fields. Please note that the Spray Irrigation field has been reduced to 66.36 acres instead of 95 acres as noted on the plan.

2. LICENSE SUMMARY

a. Terms and conditions - This licensing action is establishing narrative as well as numeric standards for the monitoring of process wastewater in the effluent lagoon, spray and snow irrigation systems as well as ambient conditions in the associated on-site monitoring wells.

b. History: The most current relevant regulatory actions and or significant events include the following;

April 26, 2019 – The licensee submitted an application for the discharge of wastewater associated with the processing of potatoes. The Department accepted the application as complete on April 30, 2019 and assigned Maine Compliance Tracking #MEU508272/WDL #W008272-5P-A-N.

3. CONDITIONS OF THE LICENSE

Conditions of licenses, 38 M.R.S. Section 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Water Classification System.

4. RECEIVING WATER QUALITY STANDARDS

Classification of ground water, 38 M.R.S.A § 470 classifies the ground water at the point of discharge as Class GW-A. *Standards for the classification of ground water*,38 M.R.S. §465-C(1) describes the standards for Class GW-A waters as the highest classification of ground water that must be of such quality that it can be used for public water supplies. These waters must be free of radioactive matter or any matter that imparts color, turbidity, taste, or odor which would impair the usage of these waters, other than occurring from natural phenomena.

5. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Slow rate land irrigation treatment and snowmaking are environmentally sound and appropriate technology for best practicable treatment and disposal of wastewater. The soils and vegetation within the irrigation area will provide adequate filtration and absorption to preserve the integrity of the soil, and both the surface and groundwater quality in the area.

The Department has established storage lagoon effluent, spray irrigation and snowmaking field, and monitoring well monitoring parameters in order to provide consistency across similar facilities now licensed with the Department.

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

a. *Freeboard* – Freeboard is the vertical distance from the surface water level in the lagoon to a point that is even with the top of the lagoon dike wall.

b. *Depth to Water Level Below Landsurface* – Measuring the distance from the ground level to the groundwater surface in monitoring wells will be used to monitor representative groundwater conditions.

c. *Biochemical Oxygen Demand* (BOD_5) - Monitoring for BOD yields an indication the condition of the wastewater being applied, of excessive loading of organic material and the effectiveness of the spray-irrigation treatment process. The Department is establishing a daily maximum limit of 100 mg/L as a best practicable treatment (BPT) standard for spray irrigation facilities along with a 1/Month monitoring frequency.

d. *Total Suspended Solids (TSS)* - TSS in the groundwater yields an indication of the integrity of the monitoring wells. As with BOD_5, the Department is establishing a daily maximum limit of 100 mg/L as a best practicable treatment (BPT) standard for spray irrigation facilities along with a 1/Month monitoring frequency.

e. *Nitrate-nitrogen* - Nitrogen compounds are by-products of the biological breakdown of ammonia in the waste water. Because nitrate-nitrogen is weakly absorbed by soil, it functions as a reliable indicator of contamination from waste-disposal sites. Elevated levels of nitrate-nitrogen in the drinking water supply are of human health concern. The limit of 10 mg/L is a National Primary Drinking Water standard.

f. *Specific Conductance* – Specific conductance is considered a "field" parameter, meaning that it is measured directly in the field via instrumentation and does not require laboratory analysis. It is considered a surveillance level monitoring parameter that is used as an early warning indicator of potential groundwater or surface water contamination.

g. *Temperature* – Temperate is considered a "field" parameter, meaning that it is measured directly in the field via instrumentation and does not require laboratory analysis. It is considered a surveillance level monitoring parameter that is used as an early warning indicator of potential groundwater contamination.

h. *pH* – pH is considered to be a "field" parameter meaning that it is measured directly in the field via instrumentation and does not require laboratory analysis.

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

i. *Metals* – Total metals are required to be analyzed once per 5 years to determine the character of the effluent from the storage lagoon.

The purpose of ground water monitoring for the metals specified in this license is to evaluate the concentration of these pollutants for which National Primary Drinking Water Standards (NPDWS) pursuant to 40 CFR Part 141 or Secondary Maximum Contaminant Levels (SMCL) pursuant to 40 CFR Part 143.3 have been established, and to assist in discerning whether any increases in ground water levels may be attributed to the wastewater applied to the ground surface.

Storage Lagoon Effluent (Outfall #001A)

This licensing action is establishing freeboard, TSS, BOD_5, Nitrate-Nitrogen, pH, and metals monitoring requirements for Outfall #001 as listed in Special Condition A.1 of this license.

Spray Irrigation Field Outfall (SF #1)

Application Rate – This licensing action is establishing a Weekly Maximum application rate of 31,028 gallons/acre and a reporting condition for the monthly total in gallons for SF #1 (66.36 acres). The weekly maximum application rate was calculated using the following formula:

Total Volume to discharge via spray irrigation = 44,269,060 gallons
44,269,060 gallons/86 days = 514,757 gallons/day
514,757 gallons x 4 days = 2,059,028 gallons/week

2,059,028 gallons/week ÷ 66.36 (acres) = 31,028 gallons/week/acre

The weekly limits are established as a margin of safety against hydraulically overloading a spray field.

Snowmaking Field Outfall (SM#1)

Application Rate – This licensing action is establishing an annual total application rate of 32 million gallons to be applied to SM#1 from December 1 through March 31, annually. The Department is also establishing a monthly total reporting condition for gallons applied to the snowmaking field. The annual total was calculated using estimates of precipitation and volume of wastewater expected to be generated from the facility process.

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

Groundwater Monitoring Wells (MW01, MW02, MW03, MW04, MW05, MW06, MW07, MW08, MW09, MW10, and MW11)

This licensing action is establishing monitoring requirements for the above listed monitoring wells as listed in Special Condition A.4 of this license.

6. SYSTEM CALIBRATION

Discharge rates, application rates and uniformity of application change over time as equipment gets older and components wear, or if the system is operated differently from the assumed design. Operating below design pressure greatly reduces the coverage diameter and application uniformity (resulting in increased ponding). For these reasons, the licensee should field calibrate their equipment on a regular basis to ensure proper application and uniformity, and when operating conditions are changed from the assumed design.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As licensed, 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 water body to meet standards for Class GW-A classification.

8. PUBLIC COMMENTS

Public notice of this application was made in the Star Herald newspaper on or about April 17, 2019. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft licenses 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, 2011).

9. DEPARTMENT CONTACTS:

Additional information concerning this licensing action may be obtained from and written comments should be sent to:

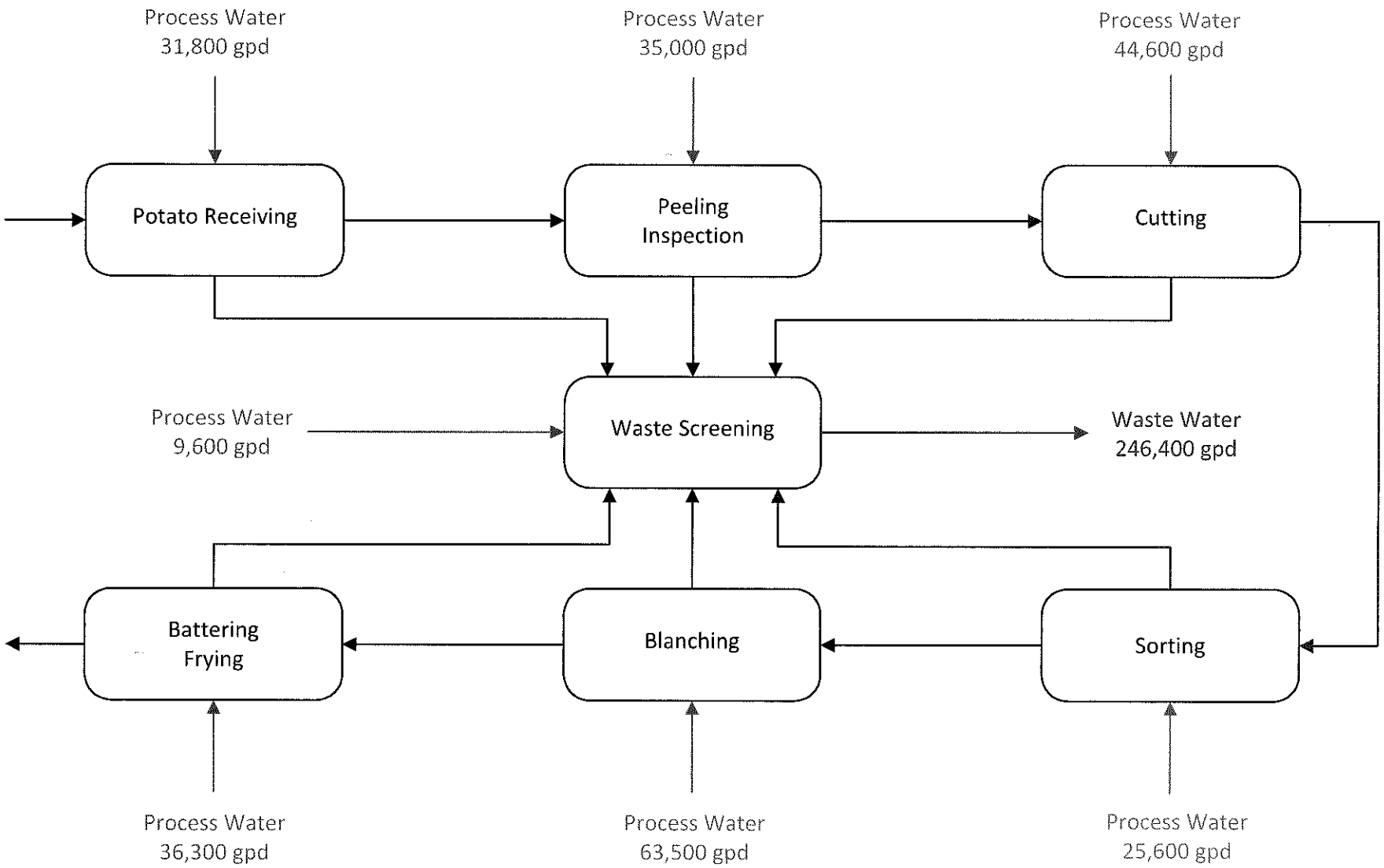
Cindy Dionne
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017
Telephone (207) 287-7823
E-mail: cindy.l.dionne@maine.gov

10. RESPONSE TO COMMENTS

Reserved until the end of the public comment period.

ATTACHMENT A

Process Water Usage - Potato Specialties Process Facility
Penobscot McCrum



ATTACHMENT B

PLAN
SCALE: 1"=250'

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1	ISSUED FOR PERMITTING	J.WIE	4-19
2			
3			
4			
5			

DESIGNED BY:... J.WAL
CAD COORD:... M.LAP
CAD:... M.LAP
CHECKED BY:... J.WAL
DATE:... 4-24-19
APPROVED BY:... J.WIE
DATE:... 4-24-19
PROJECT NO:... 14106A

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PROPOSED MONITORING WELL LOCATION PLAN

DRAWING
C-1