STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

November 16, 2016

John Flanders, EHS Manager
Hillandale Farms Conn, LLC
272 Plains Road
Turner, ME. 04282
jflander@hilfarms.com

Sent via electronic mail
Delivery confirmation requested

RE: Maine Tracking #MEU508094
Maine Waste Discharge License (WDL) Application #W008094-5O-H-R
Finalized MEPDES License

Dear Mr. Flanders:

Enclosed please find a copy of your **final** MEPDES license and Maine WDL **renewal** which was approved by the Department of Environmental Protection. Please read this license renewal and its attached conditions carefully. Compliance with this license will protect water quality.

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

If you have any questions regarding the matter, please feel free to call me at 287-7693.

Your Department compliance inspector copied below is also a resource that can assist you with compliance. Please do not hesitate to contact them with any questions.

Thank you for your efforts to protect and improve the waters of the great state of Maine!

Sincerely,

Cindy L. Dionne
Division of Water Quality Management
Bureau of Water Quality
ph: 207-557-5950

Enclosure

ec: Pamela Parker, DEP
Denise Behr, DEP
Lori Mitchell, DEP
Olga Vergara, USEPA
Sandy Mojica, USEPA
Marelyn Vega, USEPA
Richard Carvalho, USEPA

DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012 **Contact: (207) 287-2811**

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's ("DEP") Commissioner: (1) in an administrative process before the Board of Environmental Protection ("Board"); or (2) in a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S.A. §§ 341-D(4) & 346, the *Maine Administrative Procedure Act*, 5 M.R.S.A. § 11001, and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner's decision was filed with the Board will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by the Board's receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time submitted:

1. *Aggrieved Status.* The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing on the appeal is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
7. *New or additional evidence to be offered.* The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2.

Other Considerations in Appealing a Decision to the Board

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed the license normally remains in effect pending the processing of the appeal. A license holder may proceed with a project pending the outcome of an appeal but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

What to Expect Once You File a Timely Appeal with the Board

The Board will formally acknowledge receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P 80C. A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board's or the Commissioner's decision becoming final.

An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452 or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.

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

DEPARTMENT ORDER

IN THE MATTER OF

HILLANDALE FARMS CONN, LLC)	PROTECTION AND IMPROVEMENT
TURNER, ANDROSCOGGIN COUNTY, MAINE)	OF WATERS
SURFACE WASTEWATER DISPOSAL SYSTEM)	
ICIS TRACKING #MEU508094)	WASTE DISCHARGE LICENSE
WDL #W008094-5O-H-R **APPROVAL**)	**RENEWAL**

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

APPLICATION SUMMARY

On June 17, 2016, the Department accepted as complete for processing an application from Hillandale for renewal of Waste Discharge License (WDL) #W008094-5O-D-R / Integrated Compliance Information System (ICIS) tracking #MEU508094 which was issued on October 4, 2011 for a five-year term. The 10/4/11 WDL authorized the seasonal weekly discharge of 27,150 gallons per acre per week of egg wash wastewater and sanitary wastewater associated with the egg wash plants to ground water (GW-A) via spray irrigation to 68 acres of land in Turner, Maine.

LICENSE SUMMARY

This licensing action is different from the October 4, 2011 license in that:

1. The weekly maximum application rate of wastewater discharged to the Spray Irrigation fields will no longer be reported to the Department in gallons per acre. Rather a maximum weekly volume is being established to allow for flexibility in management of the fields;

2. Special Condition D. *Disposal of Transported Wastes in the Waste Water Treatment Facility,* has been eliminated as transported wastes are not accepted at this facility; and

3. Requires the licensee to investigate the source of elevated specific conductivity results in monitoring well MW-503 under Special Conditions *A. Effluent Limitations And Monitoring Requirements A.3* (Footnote #8A).

CONCLUSIONS

Based on the findings summarized in the attached Fact Sheet dated November 15, 2016, 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 water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

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

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

4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in 38 M.R.S. § 414-A(1)(D).

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ACTION

THEREFORE, the Department APPROVES the above noted application of HILLANDALE FARMS CONN, LLC to operate a surface wastewater disposal system (spray irrigation) associated with two wastewater treatment lagoon systems located in Turner, Maine, with a maximum weekly discharge of 1,846,200 gallons during the period of April 15-November 15, annually, to the soil above ground water resources of the State, Class GW-A, 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 becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this license, the terms and conditions of this license and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. *Maine Administrative Procedure and Services*, 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 16th DAY OF November 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhns
for PAUL MERCER, Commissioner

Filed
NOV 16 2016
State of Maine
Board of Environmental Protection

Date of initial receipt of application: June 14, 2016
Date of application acceptance: June 17, 2016

Date filed with Board of Environmental Protection _____

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

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The licensee is authorized to discharge treated sanitary wastewater from two storage lagoons to land. **STORAGE LAGOON EFFLUENT (OUTFALLS #LE1A and LE2A)** must be limited and monitored as specified below[(1)].

	Monthly Total	Daily Maximum	Measurement Frequency	Sample Type
Lagoon Influent Flow *[78886]*	Report Gallons/Month *[8D]*	---	Continuous[(2)] *[99/99]*	Measure *[MS]*
Specific Conductance *(Lagoon Effluent)* *[00095]*	---	Report µmhos/cm *[11]*	Weekly[(2)] *[01/07]*	Grab *[GR]*
Biochemical Oxygen Demand *(Lagoon Effluent)* *[00310]*	---	100 mg/L *[19]*	1/Month[(2)] *[01/30]*	Grab *[GR]*
Total Suspended Solids *(Lagoon Effluent)* *[00530]*	---	100 mg/L *[19]*	1/Month[(2)] *[01/30]*	Grab *[GR]*
Nitrate-Nitrogen *(Lagoon Effluent)* *[00620]*	---	Report mg/L *[19]*	1/Month[(2)] *[01/30]*	Grab *[GR]*
pH (Standard Units) *(Lagoon Effluent)* *[00400]*	---	Report S.U. *[12]*	1/Month[(2)] *[01/30]*	Grab *[GR]*
Metals (Total) *(Lagoon Effluent)* 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)] *[01/5Y]*	Grab *[GR]*

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

FOOTNOTES: See Pages 7 through 8 of this license for applicable footnotes.

SPECIAL CONDITIONS

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

2. Beginning the effective date of this license, application of wastewater to the land via a spray irrigation system must be limited to the time period **April 15th to November 15th of each calendar year**. The **SPRAY-IRRIGATION FIELDS TF1A** (Spray Area "A" on Fact Sheet Attachment C), **TF1B** (Spray Area "B" on Fact Sheet Attachment C), **& TF2A** (Spray Area "2" on Fact Sheet Attachment C) must be limited and monitored as specified below [(1)].

TF1A is 21.0 acres located northerly of lagoon LE1A.
TF1B is 21.0 acres located southerly of lagoon LE1A.
TF2A is 26.0 acres located southerly of lagoon LE2A.

	Monthly Total	Weekly Maximum	Measurement Frequency	Sample Type
Application Rate *[51125]*	---	1,846,200 gallons[(4)(5)] *[8B]*	1/Week *[01/07]*	Calculate *[CA]*
Flow *[78886]*	Report (Gallons/Month) *[8D]*	---	1/Month *[01/30]*	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 7 through 8 of this license for applicable footnotes.

SPECIAL CONDITIONS

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

3. Beginning the effective date of this license, **GROUNDWATER MONITORING WELLS MW-401, MW-402, MW-403, MW-404** (corresponding to the monitoring wells surrounding the lagoon LE1), **MW-405, and MW-407** (corresponding to the wells in spray area TF1A and TF1B respectively), **MW-501, MW-502, MW-503, MW-504** (corresponding to the wells surrounding lagoon LE2), and **MW-505** (corresponding to the well in spray area TF2A) must be limited and monitored as specified below [(1)].

	Daily Maximum	Measurement Frequency	Sample Type
Depth to Water Level Below Land Surface *[72019]*	Report (feet)[(6)] *[27]*	3/Year[(7)] *[02/YR]*	Measure *[MS]*
Nitrate-Nitrogen *[00620]*	10 mg/L *[19]*	2/Year[(7)] *[02/YR]*	Grab *[GR]*
Chloride (Total) *[00940]*	Report (mg/L) *[19]*	2/Year[(8)] *[02/YR]*	Grab *[GR]*
Specific Conductance *[00095]*	Report (µmhos/cm) *[11]*	2/Year[(8)(8A)] *[02/YR]*	Grab *[GR]*
Temperature *[00011]*	Report (°F) *[15]*	2/Year[(8)] *[02/YR]*	Grab *[GR]*
pH (Standard Units) *[00400]*	6.0-9.0 (S.U.) *[12]*	2/Year[(8)] *[02/YR]*	Grab *[GR]*
Total Suspended Solids *[00530]*	Report (mg/L) *[19]*	2/Year[(8)] *[02/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)] *[01/5Y]*	Grab *[GR]*

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

FOOTNOTES: See Pages 7 through 8 of this license for applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes

1. **Sampling** – 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 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). 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.

   Lagoon effluent must be sampled at a point in the storage lagoon in the area where the effluent is drawn off for spray irrigation or at a sampling port on the discharge pipe leading to the spray irrigation area and must be representative of what is actually sprayed on the fields. Any change in sampling location must be approved by the Department in writing.

2. **Lagoon effluent sampling** must be conducted in the months of **April, May, August, and October** of each calendar year. Monitoring is not required during months when no wastewater is disposed of via the spray irrigation system. **Lagoon influent volume must be monitored year-round** with readings recorded weekly to evaluate the amount of gallons directed to each separate lagoon system. The total monthly flow in gallons must be reported each month where applicable. Influent and effluent flow meters must be checked for calibration at least once per calendar year.

3. Metals testing must be performed in the twelve-month period prior to the expiration date of the license.

4. "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.

5. For 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. See Fact Sheet **Attachment B** for the components of a Spray-Irrigation Field Calibration Report.

6. Depth to Water Level Below Land Surface - 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.

SPECIAL CONDITIONS

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

Footnotes

7. Depth to Water Level Below the Land Surface must be conducted in the months **of May, August and October** of each calendar year.

8. Groundwater sampling must be conducted in the months of **May and October** of each year. Sampling, handling and preservation must be conducted in accordance with approved methods in 40 CFR Part 136. 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 that is calibrated before use. The licensee is required to test for these parameters in the groundwater whether or not wastewater was disposed of via the spray-irrigation system.

   8.A. The licensee must investigate the source of elevated specific conductivity results in MW-503.

B. TREATMENT PLANT OPERATOR

The person who has the management responsibility over the treatment facility must hold a Maine **SITS-II (or higher)** certificate or must be a Maine Registered 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 licensee may engage the services of the contract operator.

C. AUTHORIZED DISCHARGES

The licensee is authorized to discharge treated lagoon supernatant effluent only in accordance with: 1) the licensee's General Application for Waste Discharge License, accepted for processing on June 17, 2016; 2) the terms and conditions of this license; and 3) to spray irrigation fields TF1A, TF1B, TF2A, as indicated in the Waste Discharge License application. Discharges of wastewater from any other point source 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.

SPECIAL CONDITIONS

D. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent must not contain materials in concentrations or combinations which would impair the uses designated for the classification of the ground water (GW-A).

2. The effluent must not lower the quality of any classified body of water (ground water is a classified body of water under 38 M.R.S. § 465-C) below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

E. NOTIFICATION REQUIREMENT

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

1. Any introduction of pollutants into the wastewater collection and treatment system from an indirect discharger in a primary industrial category discharging process wastewater; and

2. Any substantial change 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. 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.

F. GENERAL OPERATIONAL CONSTRAINTS

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

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

3. The surface wastewater disposal systems must not cause the lowering of the quality of the ground water, as measured in the ground water monitoring wells specified by this license, below the State Primary and Secondary Drinking Water Standards specified in the Maine State Drinking Water Regulations, *Water for Human Consumption*, 22 M.R.S. § 2611 *et seq.*

SPECIAL CONDITIONS

F. GENERAL OPERATIONAL CONSTRAINTS (cont'd)

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

4. The Department must be notified as soon as the licensee becomes aware of any threat to public health, unlicensed discharge of wastewater, sanitary system overflows (SSO's) or any malfunction that threatens the proper operation of the system. Notification must be made in accordance with the attached Standard Condition #4 of this license. A *sanitary sewer overflow* (SSO) is the release of raw sewage from a sanitary collection system prior to reaching the treatment plant or facility. Spills out of manholes, into basements, onto municipal or private property, etc, and into the waters of the State are all considered to be SSO's.

5. 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.

6. System components including collection pipes, tanks, manholes, pumps, pumping stations, spray disposal fields, and monitoring wells must be identified and referenced by a unique identifier (alphabetic, numeric, or alpha-numeric) in all logs and reports.

7. Neither manure waste nor septage may be stored adjacent to (within 25 feet) the perimeter(s) or applied to the spray irrigation fields at any time due to the interference the activity may cause in monitoring well results.

G. SPRAY IRRIGATION OPERATIONAL CONSTRAINTS

1. Wastewater may 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. The licensee must not allow significant runoff or ponding within or out of the spray irrigation area due to the spray irrigation events.

2. There must be at least 10 inches of separation from the ground surface to the ground water table prior to spray irrigation operations.

3. No wastewater may be applied to the site following a rainfall accumulation exceeding 1.0 inch 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 may be applied where there is snow present on the surface of the ground.

SPECIAL CONDITIONS

G. SPRAY IRRIGATION OPERATIONAL CONSTRAINTS (cont'd)

5. No wastewater may be applied when there is any evidence of frost or frozen ground within the upper 10 inches of the soil profile.

6. Care must be taken when operating equipment in the spray irrigation area in order to minimize disturbance during periods when spray irrigation operations are being conducted.

H. SPRAY IRRIGATION OPERATIONAL PROCEDURES, LOGS AND REPORTS

1. **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 site conditions are appropriate (frozen ground, soil moisture, etc.) for spray irrigation.

2. The licensee must install the equivalent of one ground water level inspection well to verify that 10 inches of separation from the ground surface to the observed ground water level is present prior to spraying. Depths to ground water must be recorded in accordance with the format of *"Depth to Ground Water"* provided as **Attachment C** of this license.

3. The licensee must at all times maintain in good working order and operate at maximum efficiency all wastewater collection, treatment and/or control facilities (including piping and pump stations). Should significant malfunctions or leaks be detected, the licensee must shut down the malfunctioning portion 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.

4. **The licensee must maintain a daily log** of all spray irrigation operations which records, the date, weather and soil conditions, 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 format of the *"Monthly Operations Log"* provided as **Attachment A** of this license. Weekly spray application rates must be reported in accordance with the format of the *"Spray Application Report by Week"* provided as **Attachment B** of this license.

5. The *Monthly Operations Log, Spray Application Report by Week, and Depth to Groundwater* for each month must be submitted to the Department as an attachment to the monthly Discharge Monitoring Reports (DMRs). Copies will also be maintained on site for Department review and for license operation maintenance purposes.

I. VEGETATION MANAGEMENT

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

SPECIAL CONDITIONS

I. VEGETATION MANAGEMENT (cont'd)

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.

J. LAGOON MAINTENANCE

1. The integrity of the lagoons must be inspected periodically during the operating season and properly maintained at all times. There must be no overflow through or over the banks. Any signs of leaks or overflow must be repaired or corrected immediately and reported to the Department within 24 hours of knowledge of the leak or overflow.

2. The licensee must maintain the lagoon freeboard at design levels or at least two (2) foot, whichever is greater. The lagoons must be operated in such a way as to balance the disposal of wastewater via spray irrigation and to ensure that design freeboard levels are maintained.

3. The treatment lagoons and storage lagoons must be checked once every five years for sludge amounts using a sludge judge or other method approved by the Department and dredged as necessary to maintain the proper operating depths in both lagoons that will provide best practicable treatment of the wastewater. The inspector may require additional monitoring in the event that conditions warrant further investigation. All material removed from the lagoon(s) must be properly disposed of in accordance with all applicable State and Federal rules and regulations.

K. 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, storage tanks, spray apparatus, lagoon liner conditions, and pipes. At a minimum, the logs must include the unique identifier [alphabetic, numeric or alpha-numeric -see Special Condition G(6)], the date of maintenance, type of maintenance performed, names or person performing the maintenance, and other relevant system observations.

L. GROUNDWATER MONITORING WELLS AND WATER QUALITY MONITORING PLAN DETAILS

The licensee must maintain an up-to-date ground water quality monitoring plan showing the locations and well construction details of the wells, groundwater flow direction, and well sampling results as well as a comprehensive evaluation of the efficiency of the treatment system and testing methodology. The licensee must refer to guidance for said plan as outlined in Fact Sheet **Attachment B** entitled, *"Water Quality Monitoring Plan Details."*

SPECIAL CONDITIONS

L. GROUNDWATER MONITORING WELLS AND WATER QUALITY MONITORING PLAN DETAILS (cont'd)

All monitoring wells must be equipped and maintained 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. 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 to not provide data representative of groundwater conditions.

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

This facility must have a current written comprehensive Operation & Maintenance (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.

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.

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.

N. PUBLIC ACCESS TO LAND APPLICATION SITES AND SIGNAGE

Access to the land application sites must be limited during the season of active site use. The licensee must install signs measuring at least 8 ½" x 11", in areas of concern around the perimeter of the lagoon and spray irrigation site that inform the general public that the area is being used to dispose of wastewater. The signs must be constructed of materials that are weather resistant. The licensee must annually inspect and make any necessary repairs to the signage to comply with this condition.

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SPECIAL CONDITIONS

O. MONITORING AND REPORTING

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 the Department's Regional Office** such that the DMRs are **received by the Department on or before the fifteenth (15th) day of the month** following the complete A signed copy of the DMR and all other reports required herein must be submitted to the following address:

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

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

P. REOPENING OF LICENSE FOR MODIFICATION

Upon evaluation of test results required by this license, new site specific information or any other pertinent information gathered 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, 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 respects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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 **(Month/Year)** _____)

WDL #_____ Fields # Weekly Application Rate: _____ gallons/acre (inches)

	A	B	C	D	E	F	G	H	I	J	K
Day	DATE	PRECIP Inches	TEMP	WEATHER	WIND- Direction Speed	Soil Moisture	Quantity- Total Gallons Pumped	Name of Field(s) Used	Acres Sprayed (Sum of Col H x Area of Each Field)	Gallons/Acre (inches) (Col G divided by I)	Total Inches
	1										
	2										
	3										
	4										
	5										
	6										
	7										
	8										
	9										
	10										
	11										
	12										
	13										
	14										
	15										
	16										
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	18										
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	21										
	22										
	23										
	24										
	25										
	26										
	27										
	28										
	29										
	30										
	31										
Monthly Total =											

ATTACHMENT B

Spray Application Report by Week **Facility Name**_____;
WDL #_____ (Month _____, Year _____) Weekly Application Rate _____ gallons/acre _____ inches)

Field Name/#	Effective Spray Area (Acres)	Weekly Limit (Gallons/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		

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 if 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 _____

ATTACHMENT C

Depth to Groundwater (Tenths of Feet) **(Month _____, Year _____)**

WDL#_____

Field Name/#	Monitoring Location	Depth to Groundwater (Measured From Ground Surface in Tenths of Feet)					Number of Exceptions	Monthly Average Depth
		Week 1	Week 2	Week 3	Week 4	Week 5		
				Total Number of Exceptions				

Note: The Waste Discharge License requires that a depth of 10 inches from the ground surface to the groundwater table must be present prior to spraying.

Signature of Responsible Official: _____, Date _____

MAINE WASTE DISCHARGE LICENSE

Final FACT SHEET

DATE: **NOVEMBER 15, 2016**

LICENSE NUMBER: **#MEU508094**

WASTE DISCHARGE LICENSE: **#W008094-5O-H-R**

NAME AND ADDRESS OF APPLICANT:

HILLANDALE FARMS CONN, LLC
272 PLAINS ROAD
TURNER, MAINE 04282

COUNTY: **ANDROSCOGGIN**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):

272 PLAINS ROAD
TURNER, MAINE 04253

RECEIVING WATER CLASSIFICATION: **GROUND WATER/CLASS GW-A**

COGNIZANT OFFICIAL CONTACT INFORMATION:

JOHN FLANDERS, EHS MANAGER
(207) 224-6117
jflanders@hilfarms.com

CONTRACT OPERATOR:

JAMES E. HILLIER, HILLIER & ASSOCIATES
(207) 441-0540
JEHMaine@gmail.com

1. APPLICATION SUMMARY

Application: On June 17, 2016, the Department of Environmental Protection (Department) accepted as complete for processing an application from HILLANDALE FARMS CONN, LLC (Hillandale/licensee) for renewal of Waste Discharge License (WDL) #W008094-5O-D-R / Integrated Compliance Information System (ICIS) tracking #MEU508094 which was issued on October 4, 2011 for a five-year term. The 10/4/11 WDL authorized the seasonal weekly discharge of 27,150 gallons per acre per week of egg wash wastewater and sanitary wastewater associated with the egg wash plants to ground water (GW-A) via spray irrigation to 68 acres of land in Turner, Maine.

2. LICENSE SUMMARY

a. Terms and Conditions: This licensing action is carrying forward all the terms and conditions of the previous license except:

1. The weekly maximum application rate of wastewater discharged to the Spray Irrigation fields will no longer be reported to the Department in gallons per acre. Rather a maximum weekly volume is being established to allow for flexibility in management of the fields;

2. Special Condition D. *Disposal of Transported Wastes in the Waste Water Treatment Facility,* has been eliminated as transported wastes are not accepted at this facility; and

3. Requires the licensee to investigate the source of elevated specific conductivity results in monitoring well MW-503 under Special Conditions *A. Effluent Limitations And Monitoring Requirements A.3* (Footnote #8A).

b. History: The most current relevant regulatory actions include:

September 3, 1999 – The Department received an application to install, operate and maintain a surface wastewater disposal system to treat egg washing and sanitary wastewater generated by Quality Egg.

March 14, 2000 – The Department issued Waste Discharge License #W008094-5O-A-N authorizing the treatment and discharge of wastewater generated by the facility.

March 8, 2005 – The Department issued WDL #W008094-5O-B-R for a five-year term.

March 13, 2009 – The Department transferred WDL #W008094-5O-B-R from Quality Egg of Maine, LLC, to Contract Farming of Maine, LLC, and assigned WDL #W008094-5O-C-T.

February 5, 2010 – The Department received an application for renewal of WDL #W008094-5O-C-T. The application was accepted as complete on 2/08/10 and was assigned WDL #W008094-5O-D-R.

May 3, 2012 – The Department transferred WDL #W008094-5O-E-T from Contract Farming of Maine, LLC to Moark, LLC.

December 16, 2011 – The Department issued minor revision WDL#W008094-5O-F-M to correct typographical errors in the (then) current license.

October 30, 2015 – The Department transferred WDL #W008094-5O-G-T from Moark, LLC to Hillandale Farms Conn, LLC.

2. LICENSE SUMMARY (cont'd)

June 14, 2016 – The Department received an application for renewal of WDL #W008094-5O-G-T. The application was accepted as complete on June 17, 2016 and was assigned WDL #W008094-5O-H-R.

c. Source Description: Each day approximately 15,000 gallons of water are used to wash eggs at seven (7) egg processing plants located on the property. In the wash plants, bits of manure and shells are washed from the eggs before they are examined, culled, graded and packaged for shipment. A small volume of sanitary wastewater from employees is included in this volume. An on-site arsenic drinking water treatment system which formerly discharged to the lagoons is no longer in use (this system was associated with a trailer park which has since been removed). Additionally, trucks and equipment are routinely washed in an enclosed facility called the "sanitation garage," generating several thousand more gallons of wastewater.

There are no combined sewer overflows associated with the facility. The licensee is not authorized to receive septage from any sources, including the onsite septic tanks used for each egg washing plant.

A map showing the location of the treatment facility is included as Fact Sheet **Attachment A**.

d. Wastewater Treatment: Wastewater treatment and disposal consists of two facilities, each having facultative lagoons and spray irrigation areas. Lagoon LE1A collects flows from sources located west of Plains Road and has a total capacity of 16 million gallons. Lagoon LE2A collects flows from sources located east of Plains Road and has a total capacity of 10 million gallons.

Each portion of the wastewater pretreatment system consists of two tanks; the first tank is a 3,000 gallon settling tank where solids are allowed to settle out of suspension and accumulate in the lower section of the tank. Flows are then conveyed to the second tank for continued settling of solids. The second tank contains a grinder pump suspended on a cable from the tank cover. When water levels rise in the second tank, a float switch on the grinder pump is activated and water is discharged into the 2-inch force main effluent system. A check valve located immediately down-flow of the pump prevents backflow from the main. All wastewater is then metered at a flow meter vault before being discharged into a wastewater treatment and storage lagoon system.

Each lagoon system has three cells for treatment and storage. Cells #1 and #2 provide an approximate detention time of 230 days. Cell #3 is designed to provide approximately 250 days of storage which accommodates wastewater flows during the time of year when spray irrigation is not licensed. The lagoons are also designed to accommodate precipitation falling into and evaporating from the cells during the 250-day storage period.

2. LICENSE SUMMARY (cont'd)

The slow-rate spray irrigation system consists of three spray sites totaling 68 acres with two, 21-acre spray areas (TF1A and TF1B identified as "Spray Area A" and "Spray Area B", respectively, in Fact Sheet **Attachment C**) associated with LE1A, and one, 26-acre spray area (TF2A identified as "Spray Area 2" in Fact Sheet **Attachment C**) associated with LE2A. Each spray site has a center pivot mechanical distribution system with a radius of 536 feet.

The following changes were made to the wastewater system since the previous licensing action and were described in the application materials:

-In 2011 and 2012, Hillandale installed a series of new monitoring wells (series "600" wells) to determine the cause of elevated Nitrate-N concentrations found in monitoring well MW-502. An elevation survey was also completed to characterize the direction of groundwater flow in the area. The investigation concluded that elevated Nitrate-N concentrations in groundwater at MW-502 did not result from a release from either the TF-2 lagoon or the wastewater force main. The most likely source of the elevated Nitrate-N is believed to be a result of fertilizer spread on an adjacent field. As a result, all fertilizing and crop growing was discontinued on that field.

In 2013, Hillandale replaced an effluent pump system which reduces the risk of a possible fire or other malfunction in the pump system from damaging the lagoon liner.

In 2013, a leak occurred in a section of the TF-2 two-inch force main just north of the floodplain for Lively Brook. No wastewater reached the brook, however, during repair of the force main, repairs were completed to the leaking pipe in the area of House Brook.

Also in 2013, a section of TF-2 two inch diameter force main located east of the TF-2 lagoon was replaced.

In 2015, in response to damage to risers in crop harvesting areas, Hillandale trimmed the standup risers to ground level and covered them with road-style metal covers. The pipes are clearly marked for identification.

Also in 2015, in response to an influent flow meter failure, a replacement meter was installed and a backup meter was purchased and is held in storage in the event that there is a similar failure. A "watch dog" sump pump system was installed in the meter chambers at both TF-1 and TF-2 as well.

Onsite soils are classified predominantly as Adams and Croghan series. Adams series soils have sandy to sandy loamy texture with rapid to very rapid permeability and 40-60 inch depth to seasonal high water table. Croghan soils have sandy textures with slow to medium permeability and 15-60 inches to seasonal high water table. The licensee maintains a vegetative management plan to address removal of biomass from the irrigation site to remove excessive nitrogen within the plant/soil system. The plan recommends a grass crop and two harvesting operations per year.

3. CONDITIONS OF LICENSE

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 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.

4. RECEIVING WATER QUALITY STANDARDS

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

5. RECEIVING WATER QUALITY CONDITIONS

The Department has no information as of the date of this licensing action, that ground water down gradient from the spray irrigation fields does not meet the standards of its assigned classification.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

a. Lagoon Influent Flow: This licensing action is carrying forward the year-round lagoon influent flow measurement frequency from the previous licensing action.

A review of the Discharge Monitoring Report (DMR) data for the period November 2011 to February 2016 (n= 51) indicates the monthly total lagoon influent flows have been reported as follows:

Outfall #	Limit (gal/month)	Range (gal/month)	Average (gal/month)
LE1A	Report	60,326 – 408,802	243,825
LE2A	Report	64,427 – 405,017	184,885

b. Lagoon Effluent Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS): Previous licensing action established, and this licensing action is carrying forward, a daily maximum best practicable treatment (BPT) standard of 100 mg/L for BOD_5 and TSS along with a 1/Month monitoring frequency when wastewater is being disposed of via the spray irrigation system.

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

The Department reviewed 12 DMRs that were submitted for the period November 2011 – February 2016. A review of data indicates the following:

BOD_5 concentration

Value	Outfall #	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	LE1A	100	10 – 110	37
Daily Maximum	LE2A	100	19 – 110	51

TSS concentration

Value	Outfall #	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	LE1A	100	3 – 120	44
Daily Maximum	LE2A	100	10 – 130	66

For calculation purposes, results reported as "less than" were considered present at the detection limit.

c. Specific Conductance: Specific conductance is considered a "field" parameter, meaning that it is typically measured directly in the field via instrumentation and may 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. Previous licensing action revised the monitoring frequency from once per week (1/Week), year-round, to 1/Week during April, May, August and October, consistent with the months when spraying is allowed (April 15 through November 15). This license is carrying forward the previously established monitoring frequency.

A review of the DMR data for the period November 2011 to February 2016 (n=15) indicates the daily maximum specific conductance values have been reported as follows:

Value	Outfall #	Limit (µmhos/cm)	Range (µmhos/cm)	Average (µmhos/cm)
Daily Maximum	LE1A	Report	688 – 1007	789
Daily Maximum	LE2A	Report	654 – 938	803

d. pH: This licensing action is establishing a pH range limitation of 6.0 – 9.0 standard units (S.U.) which is based on Department BPJ. pH is considered a surveillance level monitoring parameter that is used as an early-warning indicator of potential groundwater contamination.

A review of the DMR data for the period November 2011 to February 2016 (n=15) indicates the following:

Value	Outfall #	Limit (s.u.)	Range (s.u.)
Daily Maximum	LE1A	Report	8.3 – 10.6
Daily Maximum	LE2A	Report	8.1 – 9.8

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

e. Nitrate-nitrogen: Nitrate-nitrogen compounds are by-products of the biological breakdown of ammonia and are inherent in domestic-like sanitary wastewater. 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 Department reviewed 12 DMRs that were submitted for the period November 2011 – February 2016. A review of data indicates the following:

Value	Outfall #	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	LE1A	Report	<0.05 – 0.5	<0.1
Daily Maximum	LE2A	Report	<0.05 – 0.5	<0.1

f. Total Metals: This licensing action is carrying forward the metals monitoring frequency of once every 5 years (1/5 Years). Monitoring must be conducted in the 12-month period prior to the expiration date of the license.

A review of the DMR data for the period November 2011 to February 2016 indicates the following:

LE1A

Parameter	Limit (µg/L)	Daily Maximum Result (µg/L)
Arsenic	Report	<5
Cadmium		<0.2
Chromium		<5
Copper		<3
Lead		<3
Mercury		<0.2
Nickel		<3
Zinc		8.9

LE2A

Parameter	Limit (µg/L)	Daily Maximum Result (µg/L)
Arsenic	Report	<5
Cadmium		<0.2
Chromium		<5
Copper		<3
Lead		<3
Mercury		<0.2
Nickel		<5
Zinc		19

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

Spray Irrigation Application Fields

g. Spray Irrigation Application Rate: This license is carrying forward the weekly maximum application rate of 27,150 gallons/acre per week for each spray field. The weekly limit is based on the characteristics of in-situ soils and is considered a margin of safety against hydraulically overloading a spray area on any one given day.

A review of the DMR data for the period November 2011 to February 2016 indicates the following:

Spray Irrigation Application Rate

Value	Field #	Limit (gal/week)	Range (gal/week)	Average (gal/week)
Weekly Maximum	TF1A	27,150	4.53 – 26,986	17,064
Weekly Maximum	TF1B	27,150	0 – 26,900	17,367
Weekly Maximum	TF2A	27,150	0 – 26,250	19,808

h. Flow: This licensing action is carrying forward the monthly flow monitoring requirement from the previous licensing action. A review of the DMR data for the period November 2011 to February 2016 indicates the following:

Flow

Value	Field #	Limit (Gallons)	Range (Gallons)	Average (Gallons)
Monthly Total	TF1A	Report	95,200 – 1,650,100	761,070
Monthly Total	TF1B	Report	0 – 1,191,100	573,192
Monthly Total	TF2A	Report	0 – 2,106,000	1,078,143

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

Groundwater Monitoring Wells

During the term of this license, the licensee is required to monitor eleven existing groundwater monitoring wells. The approximate monitoring well locations within the spray-irrigation fields are shown on Fact Sheet **Attachment C**. The existing wells are:

Monitoring Wells	Location
MW-401, -402, -403, -404	Surrounding Lagoon LE1A
MW-405	Within Spray Area TF1A
MW-407	Within Spray Area TF1B
MW-501, -502, -503, -504	Surrounding Lagoon LE2A
MW-505	Within Spray Area TF2A

i. Depth to water level below land surface: Measuring the distance from the ground level to the groundwater surface in monitoring wells is used to monitor representative groundwater conditions. This licensing action carries forward the existing three per year reporting requirement (3/Year) for the months of May, August and October. This licensing action is revising measurement of groundwater depth to water level below the land surface from the nearest one-hundredth ($1/100^{th}$) of a foot to the nearest one-tenth ($1/10^{th}$) of a foot to maintain consistency with similar licenses.

A review of the DMR data for the period May 2012 to May 2016 indicates the depths to water level below land surface have been reported as follows:

Depth to Water Level Below Land Surface

Value	Outfall #	Limit (Feet)	Range (Feet)	Average (Feet)
Daily Maximum	MW401	Report	2 – 7.2	4
Daily Maximum	MW402	Report	2.9 – 55.9	9
Daily Maximum	MW403	Report	1.6 – 7	4
Daily Maximum	MW404	Report	3.3 – 9	5
Daily Maximum	MW405	Report	2.2 – 6.8	4
Daily Maximum	MW407	Report	2.2 – 9	5
Daily Maximum	MW501	Report	3.8 – 8.4	5
Daily Maximum	MW502	Report	2.6 – 9.9	6
Daily Maximum	MW503	Report	2.6 – 7.6	4
Daily Maximum	MW504	Report	1 – 6.6	4
Daily Maximum	MW505	Report	3.7 – 10	7

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

j. Nitrate-nitrogen: Nitrogen compounds are by-products of the biological breakdown of ammonia and are inherent in domestic sanitary wastewater. Because nitrate-nitrogen is weakly absorbed by soil, it functions as a reliable indicator of contamination from waste disposal sites. Nitrogen compounds can indicate human health concerns if elevated in a drinking water supply. This licensing action is also carrying forward a daily maximum limitation of 10 mg/L for nitrate-nitrogen in the ground water monitoring wells, which is based on state and federal drinking water standards.

A review of the DMR data for the period November 2011 to February 2016 indicates the daily maximum nitrate-nitrogen values have been reported as follows:

Nitrate-nitrogen

Value	Outfall #	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	MW401	10	<0.05 – 0.90	0.1
Daily Maximum	MW402	10	0.80 – 10.00	2.8
Daily Maximum	MW403	10	<0.05 – 1.00	0.4
Daily Maximum	MW404	10	<0.05 – 0.56	0.2
Daily Maximum	MW405	10	0.11 – 3.10	1.7
Daily Maximum	MW407	10	<0.05 – 5.50	1.8
Daily Maximum	MW501	10	3.40 – 6.30	5.0
Daily Maximum	MW502	10	15 – 23	18
Daily Maximum	MW503	10	<0.01 – <0.1	<0.05
Daily Maximum	MW504	10	<0.05 – 3.00	1.8
Daily Maximum	MW505	10	1.10 – 1.90	1.4

For calculation purposes, results reported as "less than" were considered present at the detection limit.

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

k. Chloride: Chloride is another early-warning indicator of potential groundwater contamination by wastewater. The National Secondary Drinking Water standard for total chloride is 250 mg/L. This licensing action is carrying forward the total chloride monitoring requirement during the months of May and October of each year. A review of the DMR data for the period November 2011 to February 2016 indicates the daily maximum Total Chloride values have been reported as follows:

Total Chloride

Value	Outfall #	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	MW401	Report	1 – 6	3
Daily Maximum	MW402	Report	<1 – 1	<1
Daily Maximum	MW403	Report	4 – 61	13
Daily Maximum	MW404	Report	1 – 2	2
Daily Maximum	MW405	Report	4 – 14	9
Daily Maximum	MW407	Report	1 – 7	3
Daily Maximum	MW501	Report	8 – 76	35
Daily Maximum	MW502	Report	1 – 2	1
Daily Maximum	MW503	Report	29 – 61	42
Daily Maximum	MW504	Report	1 – 4	2
Daily Maximum	MW505	Report	1 – 2	2

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

l. Specific Conductance: Specific conductance is considered a "field" parameter, meaning that it is typically measured directly in the field via instrumentation and may 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. This licensing action is carrying forward the specific conductance monitoring requirement during the months of May and October of each year.

A review of the DMR data for the period November 2011 to February 2016 indicates the daily maximum specific conductance values have been reported as follows:

Specific Conductance

Value	Outfall #	Limit (µmhos/cm)	Range (µmhos/cm)	Average (µmhos/cm)
Daily Maximum	MW401	Report	81 – 162	125
Daily Maximum	MW402	Report	6 – 320	210
Daily Maximum	MW403	Report	134 – 1,298	381
Daily Maximum	MW404	Report	74 – 128	114
Daily Maximum	MW405	Report	165 – 491	324
Daily Maximum	MW407	Report	150 – 267	210
Daily Maximum	MW501	Report	220 – 421	325
Daily Maximum	MW502	Report	136 – 321	259
Daily Maximum	MW503	Report	631 – 1,326	1,065
Daily Maximum	MW504	Report	140 – 427	295
Daily Maximum	MW505	Report	33 – 202	77

With this licensing action, the Department is requiring Hillandale to investigate the source of the elevated Specific Conductance results in MW-503.

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

m. Temperature: Temperature is considered a "field" parameter meaning it is measured directly in the field via instrumentation and does not require laboratory analysis. It is considered a surveillance parameter that is used as an early-warning indicator of potential groundwater contamination. This licensing action is carrying forward the temperature monitoring requirement during the months of May and October of each year.

A review of the DMR data for the period November 2011 to February 2016 indicates the daily maximum temperature values have been reported as follows:

Temperature

Value	Outfall #	Limit (°F)	Range (°F)	Average (°F)
Daily Maximum	MW401	Report	41 – 60	51
Daily Maximum	MW402	Report	44 – 59	52
Daily Maximum	MW403	Report	44 – 59	51
Daily Maximum	MW404	Report	41 – 60	51
Daily Maximum	MW405	Report	15 – 55	45
Daily Maximum	MW407	Report	43 – 58	50
Daily Maximum	MW501	Report	45 – 59	52
Daily Maximum	MW502	Report	45 – 58	52
Daily Maximum	MW503	Report	46 – 58	52
Daily Maximum	MW504	Report	43 – 58	51
Daily Maximum	MW505	Report	44 – 57	51

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

n. Total Suspended Solids (TSS): TSS in the groundwater yields an indication of the integrity of the monitoring wells. This licensing action is carrying forward the TSS monitoring requirement during the months of May and October of each year.

A review of the DMR data for the period November 2011 to February 2016 indicates the daily maximum TSS values have been reported as follows:

Total Suspended Solids

Value	Outfall #	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Daily Maximum	MW401	Report	<2 – 7.4	3
Daily Maximum	MW402	Report	<2 – 5.4	3
Daily Maximum	MW403	Report	<2 – 7.1	4
Daily Maximum	MW404	Report	2.0 – 41	16
Daily Maximum	MW405	Report	<2 – 16	6
Daily Maximum	MW407	Report	<2 – 3.5	2
Daily Maximum	MW501	Report	<2 – 9.8	3
Daily Maximum	MW502	Report	<2 – 9.7	6
Daily Maximum	MW503	Report	<2 – 11	5
Daily Maximum	MW504	Report	<2 – 5.9	3
Daily Maximum	MW505	Report	<2 – 7	3

For calculation purposes, results reported as "less than" were considered present at the detection limit.

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

o. pH: pH is considered a surveillance parameter that is used as an early-warning indicator of potential groundwater contamination. This licensing action is carrying forward the pH monitoring requirement during the months of May and October of each year.

A review of the DMR data for the period November 2011 to February 2016 indicates the daily maximum pH values were reported as follows:

pH

Value	Outfall #	Limit (SU)	Range (SU)
Daily Maximum	MW401	Report	5.6 – 7.0
Daily Maximum	MW402	Report	6.3 – 7.3
Daily Maximum	MW403	Report	6.1 – 7.3
Daily Maximum	MW404	Report	5.1 – 6.4
Daily Maximum	MW405	Report	6.1 – 7.2
Daily Maximum	MW407	Report	5.9 – 6.9
Daily Maximum	MW501	Report	6.0 – 7.3
Daily Maximum	MW502	Report	6.1 – 7.1
Daily Maximum	MW503	Report	6.2 – 7.1
Daily Maximum	MW504	Report	6.1 – 7.2
Daily Maximum	MW505	Report	5.8 – 7.0

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

p. Total Metals: This licensing action is carrying forward the metals monitoring frequency of once every 5 years (1/5 Years). Monitoring must be conducted in the 12-month period prior to the expiration date of the license.

A review of the DMR data for the period January 2012 to July 2016 indicates the daily maximum total metals values (#DMRs = 1) were reported as follows:

Total Metals Daily Maximum Result

Parameter	Limit (µg/L)	MW 401	MW 402	MW 403	MW 404	MW 405	MW 407	MW 501	MW 502	MW 503	MW 504	MW 505
Arsenic	Report	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cadmium		<0.4	<0.4	<0.4	1.1	1.7	1.2	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Copper		6.2	8.4	6.1	4.6	7.6	13.0	22.0	5.8	11.0	7.4	6.1
Lead		<3	<3	<3	<3	<3	<3	3.3	<3	<3	<3	<3
Mercury		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nickel		<3	<3	<3	<3	<3	<3	4.8	<3	<3	<3	<3
Zinc		6.1	<5	6.7	7.8	12.0	5.7	23.0	6.5	11.0	20.0	7.9

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 *Lewiston Sun-Journal* newspaper on June 13, 2016. 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 licenses shall 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 licensing action may be obtained from, and written comments sent to:

Cindy L. Dionne
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 557-5950
e-mail: Cindy.L.Dionne@maine.gov

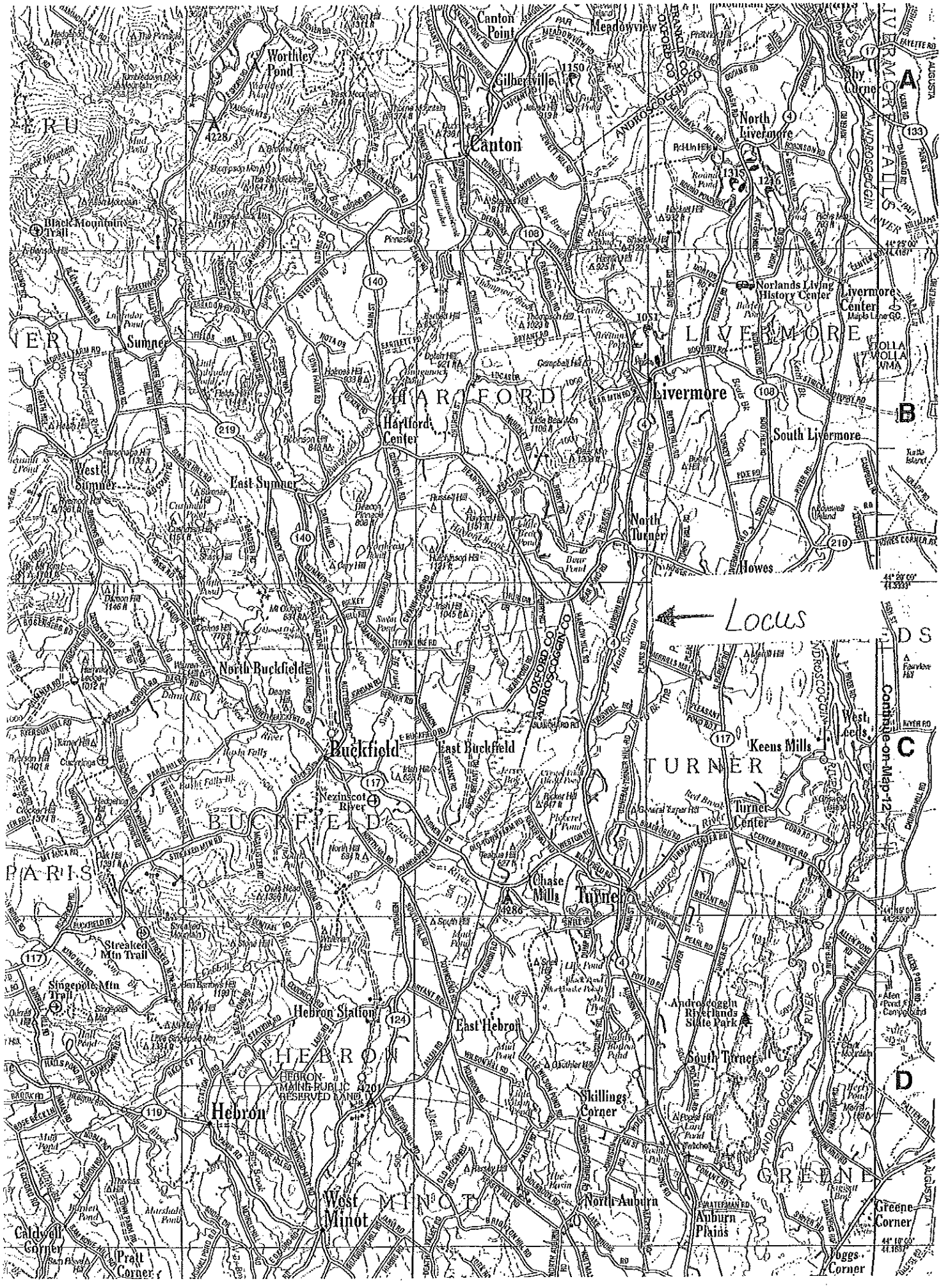
10. RESPONSE TO COMMENTS

During the period of October 13, 2016 through the issuance date of the license, the Department solicited comments on the proposed draft license to be issued for the discharge from the permittee's facility.

The Department received comments from Hillandale's operator, James Hillier, on behalf of Hillandale, via e-mail on October 18, 2016. Changes requested by Mr. Hillier (Special Condition J. *Lagoon Maintenance* item #3) were completed.

Minor edits noted by the Department's Compliance unit were also corrected. These changes were non-substantive in nature.

ATTACHMENT A


Locus
Continue on Map 12
A
B
C
D
Canton Point
Meadowview
Gilbertville
Worthley Pond
Canton
North Livermore
Livermore Falls
Androscoggin River
Norlands Living History Center
Livermore Center
Livermore
Sumner
Hartford
Hartford Center
West Sumner
East Sumner
South Livermore
North Turner
Howes
North Buckfield
Buckfield
East Buckfield
Nezinscot River
Keens Mills
West Leeds
Turner Center
Chase Mills
Turner
Streaked Mtn Trail
Singepole Mtn Trail
Hebron Station
East Hebron
Androscoggin Riverlands State Park
South Turner
Hebron
Hebron-Maine Public Reserved Land
Skillings Corner
West Minot
North Auburn
Auburn Plains
Greene Corner
Caldwell Corner
Pratt Corner
Foggs Corner
Black Mountain Trail
Oxford Co
Androscoggin Co

ATTACHMENT B

Water Quality Monitoring Plan Details
Bureau of Land & Water Quality, Div. of Environmental Assessment

For projects required to monitor the quality and/or levels of surface water or groundwater, a water quality monitoring plan/protocol document must be provided as a separate manual, for ease-of-reference by the applicant, consultants, and the Department. This manual must be prepared, signed, and dated by a professional qualified in water chemistry interpretation (and when groundwater flow interpretations and monitoring well selection are conducted to prepare the plan, endorsed by a Certified Geologist), and must in-clude the following, at a minimum:

1. Identification/summary of all monitoring points (e.g. monitoring wells, lysimeters, springs, etc.) to be used for measurement of water levels or for water quality analysis. Monitoring points must have an assigned identification symbol (alpha/numeric), and, where appropriate, elevation referenced to an es-tablished, permanent benchmark. Include a map showing all monitoring points.

2. Outline of the monitoring frequency at each monitoring point, by the number of sampling/analysis events per year (e.g. quarterly, etc.) and by month (e.g. April, September, etc.).

3. Provision for obtaining adequate data on background water quality and/or levels, and for using a statistically-valid method for determining a significant increase in parameter concentrations (e.g. contamination levels, but not necessarily MCL's/MEG's). At a minimum, determination of background water quality or levels must consist of quarterly sampling/analysis for 1 year.

4. List of parameters to be analyzed, including references to the laboratory analysis methods to be utilized for each parameter, detection limits for each analysis method, and the MCL's/MEG's for all applicable parameters. All monitoring must include field parameters (conductivity, temperature, pH, and TDS), in addition to parameters specific to the monitoring program objectives.

5. Identification of the qualified personnel to take water level measurements and water quality analysis samples. These tasks should not be done by the applicant or employee of the applicant, but if proposed, then item 6 below must be addressed.

6. Written certification from a qualified expert that personnel to conduct monitoring are or will be adequately trained to properly collect measurements and/or samples by approved methods and protocols.

7. Description of the equipment and methods to be employed for water level measurement and/or water quality analysis sample-taking.

8. Description of the quality assurance/quality control and chain-of-custody protocols to be followed for water quality sampling, preservation, storage, transport, and laboratory analysis.

9. Provision for a professional qualified in water chemistry or groundwater flow interpretation to summarize, evaluate, and provide recommendations on the monitoring results that is submitted annually to the Department, unless a problem is evident, in which case the Department is to be notified immediately. Annual reports must include historical, as well as the most recent year's monitoring data for each monitoring point, which is presented in a tabular format. Reports must be signed/dated by the professional responsible for their preparation.

10. A provision that, if water levels or water quality monitoring results indicate adverse effects are occurring as a result of the project activity, then an evaluation will be made by a qualified professional and an appropriate remedial action/mitigation plan will be developed and submitted to the Department for re-view and approval.

Example Spray Irrigation Field Calibration Report Form

Background Data

Describe the reasons for system re-calibration (example annual calibration or change in operating conditions). When there has been a change in operating conditions list the specific changes such as new components (pumps, spray heads, size or type of pipes, etc.) or previously approved design changes.

Describe the current method for estimating the flow of wastewater to the irrigation area, ie, meter or pump calibration data. When using pump calibration data list the estimated flow rate of the pump for the existing site conditions (example gallons per minute). Also note the assumed diameter of coverage for the individual spray heads and the resulting area of application (acreage). Based on this information what is the assumed application rate in inches per hour and gallons per acre. Note: 1 acre-inch equals 27,150 gallons.

System Calibration

Describe or attach illustrations of the system calibration procedure, ie, grid layout or rain gauge or other uniform containers.

List the actual radius of spray coverage of the individual spray heads as measured during the field calibration and note any application uniformity problems such as noticeable ponding or uneven applications.

Calculate the acreage of the application based on the actual radius of coverage measured in the field. Show calculations.

Example: (27,150 gallons/acre/week)(1.5 inch/week)(1.3 acres) = 52,942 gallons/week

Calculate the estimated hourly application rate in inches per hour and gallons per acre obtained during the above calibration. Show calculations.

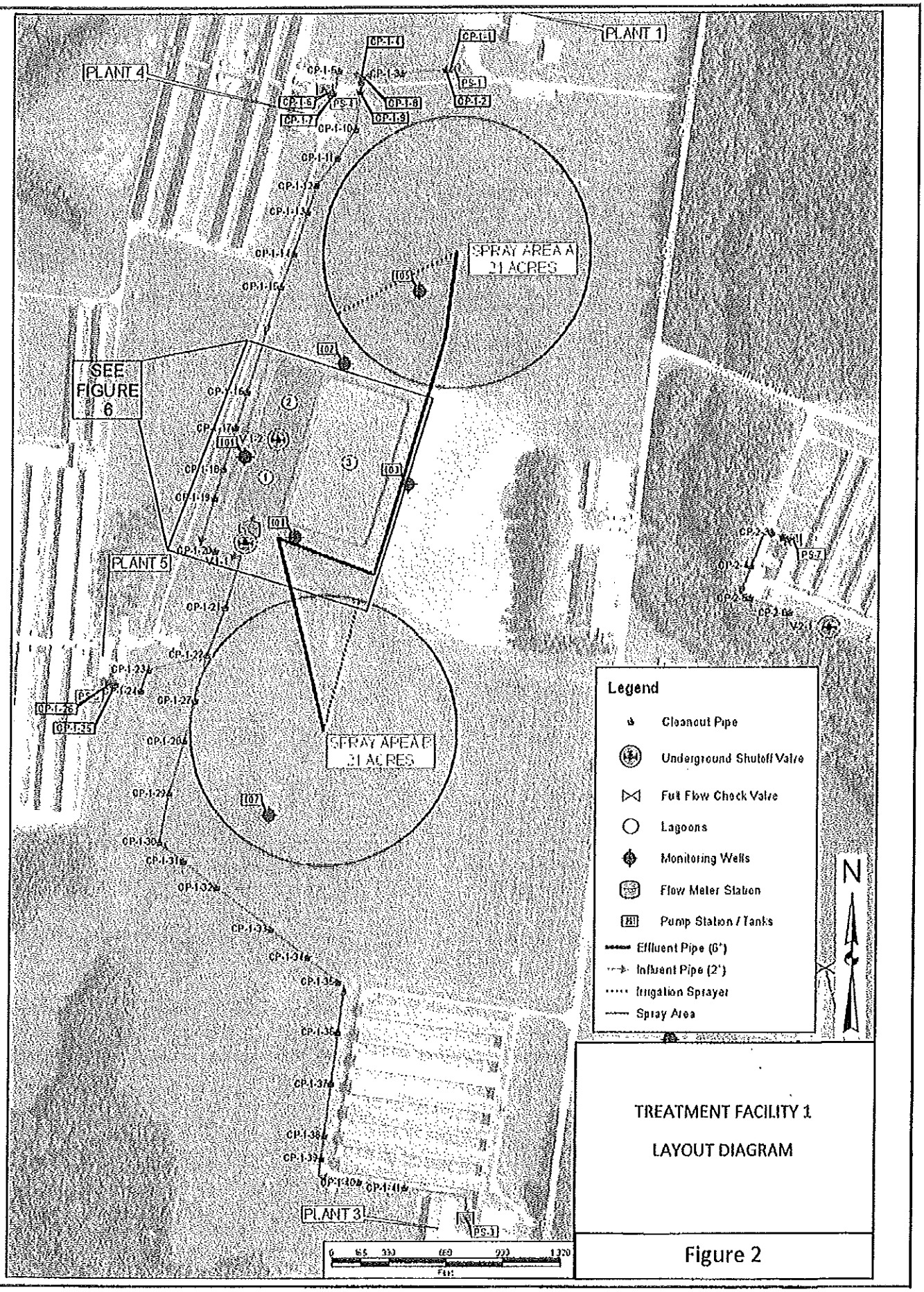
New Calibration Data

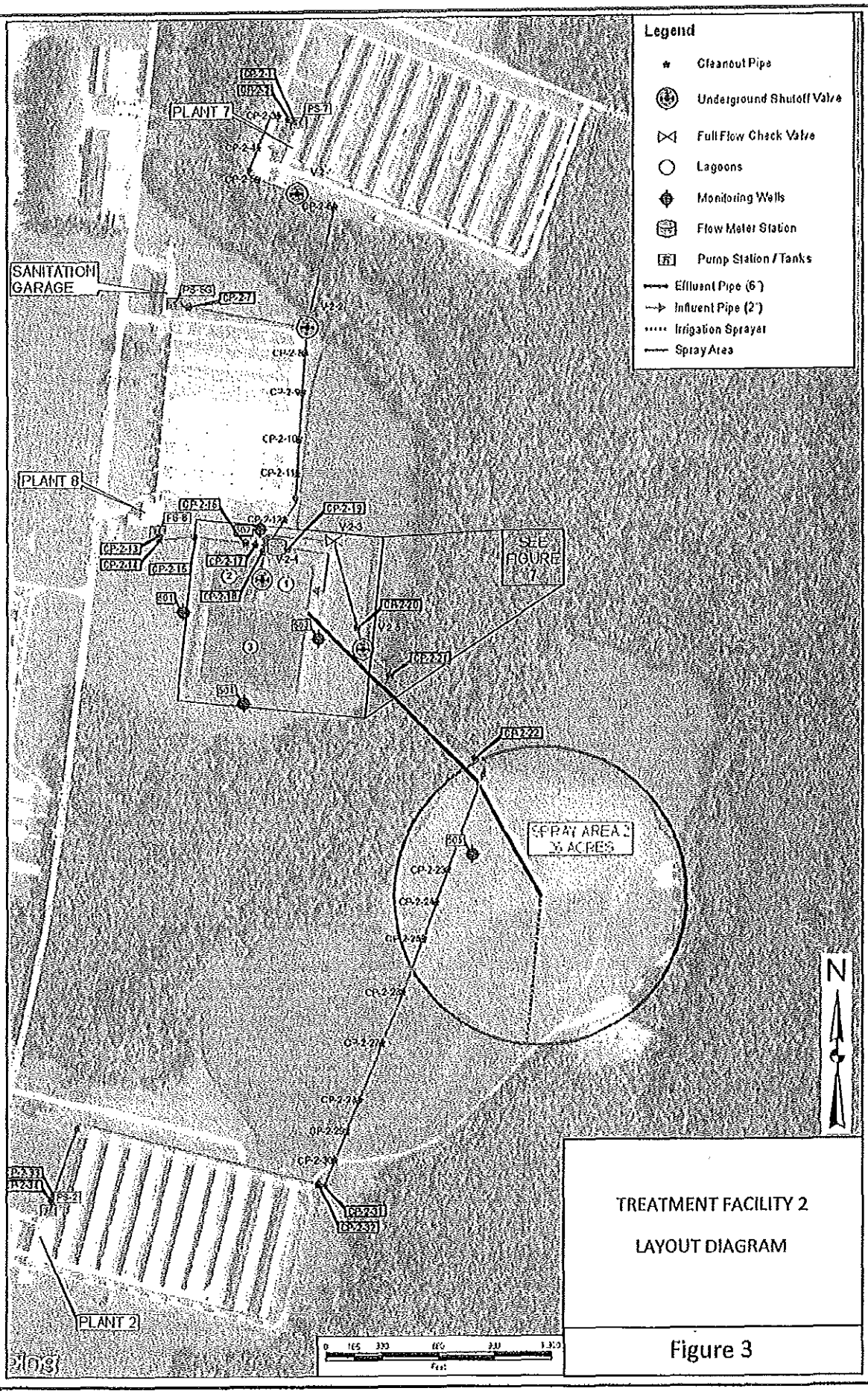
What changes to the estimates of wastewater flow are proposed, if any and why? And are the licensed application rates satisfied?

Any adjustments to improve uniformity of spray applications?

Submitted by: Signature of Operator in Responsible Charge	On Date:
Reviewed by: Signature of Operator in Responsible Charge	On Date:

ATTACHMENT C


PLANT 1
PLANT 4
PLANT 5
PLANT 3
SPRAY AREA A
21 ACRES
SPRAY AREA B
21 ACRES
SEE FIGURE 6
PS-1
PS-2
PS-3
V1-1
V1-2
V2-1
Legend
Cleanout Pipe
Underground Shutoff Valve
Full Flow Check Valve
Lagoons
Monitoring Wells
Flow Meter Station
Pump Station / Tanks
Effluent Pipe (6")
Influent Pipe (2")
Irrigation Sprayer
Spray Area
N
TREATMENT FACILITY 1
LAYOUT DIAGRAM
Figure 2


Legend
Cleanout Pipe
Underground Shutoff Valve
Full Flow Check Valve
Lagoons
Monitoring Wells
Flow Meter Station
Pump Station / Tanks
Effluent Pipe (6")
Influent Pipe (2")
Irrigation Sprayer
Spray Area
PLANT 7
PLANT 8
PLANT 2
SANITATION GARAGE
SEE FIGURE 7
SPRAY AREA 3 ACRES
N
TREATMENT FACILITY 2
LAYOUT DIAGRAM
Figure 3