STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION



BETH NAGUSKY
ACTING COMMISSIONER

November 16, 2010

VIA ELECTRONIC MAIL

Mr. John Lough Dorothy Egg Farm P.O. Box 298 Winthrop, ME 04364 dorothyegg@ctel.net

RE: Compliance Tracking #MEU508103

Maine Waste Discharge License (WDL) Application #W008103-5P-C-R

Final License - Dorothy Egg Farm, LLC

Dear Mr. Lough:

Enclosed please find a copy of your **final** Maine MEPDES Permit/WDL which was approved by the Department of Environmental Protection. Please read the license and its attached conditions carefully. You must follow the conditions in the license to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State law and is subject to enforcement action.

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 this matter, please feel free to contact me at (207) 287-7658 or at phyllis.a.rand@maine.gov.

Sincerely,

Phyllis Arnold Rand

Division of Water Quality Management

Bureau of Land and Water Quality

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Enclosure

cc: Beth DeHaas, DEP/CMRO David Webster, USEPA Sandy Mojica, EPA Lori Mitchell, DMU Robert Johnson, Wastewater Services



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

DEPARTMENT ORDER

IN THE MATTER OF

DOROTHY EGG FAR	M, LLC) Pl	ROTECTION AND IMPROVEMENT
WINTHROP, KENNE	BEC COUNTY, MAINE)	OF WATERS
SUBSURFACE WAST	EWATER DISPOSAL)	WASTE DISCHARGE LICENSE
PCS TRACKING ME	U508103)	
#W008103-5P-C-R	APPROVAL)	RENEWAL

Pursuant to the provisions of 38 M.R.S.A Section 414-A et seq., and applicable regulations, the Department of Environmental Protection ("Department") has considered the application of the DOROTHY EGG FARM, LLC, ("licensee") with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The licensee has applied for a renewal of Waste Discharge License (WDL) #W008103-5P-B-R, which was issued on September 28, 2005 and expired on September 28, 2010. The previous WDL authorized the discharge of 3,000 gallons per day (gpd) of treated egg washing and sanitary wastewater from an egg packing plant to the groundwater, Class GW-A, via a sub-surface wastewater disposal system in Winthrop, Maine.

LICENSE MODIFICATION REQUESTED

The licensee is requesting a monitoring frequency reduction for Outfall #002 from monthly to quarterly.

LICENSE MODIFICATION GRANTED

The Department is reducing the monitoring frequency for Outfall #002 from monthly to quarterly for BOD5, TSS, Nitrate, Nitrite, Ammonia nitrogen, TKN, Total Nitrogen and pH.

LICENSE SUMMARY

With the exception of the modifications noted above, this licensing action is carrying forward the terms and conditions of the previous licensing action.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated November 16, 2010, and subject to the Conditions listed below, the Department makes the following conclusions:

- 1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
- 2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
- 3. The provisions of the State's antidegradation policy, 38 MRSA Section 464(4)(F), will be met, in that:
 - (a) Existing water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
 - (c) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
- 4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

ACTION

THEREFORE, the Department APPROVES the above noted application of the DOROTHY EGG FARM, LLC, in Winthrop, Maine, to discharge 3,000 gallons per day of treated sanitary and treated egg processing wastewater to ground water, Class GW-A, SUBJECT TO THE FOLLOWING CONDITIONS, and all applicable standards and regulations including:

- 1. Standard Conditions of Approval for Industrial Waste Discharge Licenses (Revised August 14, 1996), copy attached.
- 2. The attached Special Conditions, including effluent limitations and monitoring requirements.
- 3. This license becomes effective upon the date of signature below and expires at midnight five (5) years thereafter.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: <u>June 14, 2010</u> Date of application acceptance: <u>July 1, 2010</u>

This Order prepared by PHYLLIS ARNOLD RAND, BUREAU OF LAND & WATER QUALITY MEU508103 2010

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. Beginning the effective date of this license, the licensee is authorized to operate a sequencing batch reactor (SBR) and sub-surface wastewater treatment disposal system. Such discharges shall be limited and monitored by the licensee as specified below (1):

OUTFALL #002B

Effluent Parameter	Monthly Average	Daily <u>Maximum</u>	Minimum Measurement <u>Frequency</u>	Sample <u>Type</u>
Flow [78886]	3,000 Gallons [07]	Report, Gallons [07]	Daily [01/01]	Measure [MS]
BOD [00310]	100 mg/L [19]	Report, mg/L [19]	1/Quarter [01/90]	Grab [GR]
TSS [00530]	100 mg/L [19]	Report, mg/L [19]	1/Quarter [01/90]	Grab [GR]
Nitrate [00620]	Report, mg/L [19]	Report, mg/L [19]	1/Quarter [01/90]	Grab [GR]
Nitrite [00615]	Report, mg/L [19]	Report, mg/L [19]	1/Quarter [01/90]	Grab [GR]
Ammonia-N [00610]	Report, mg/L [19]	Report, mg/L [19]	1/Quarter [01/90]	Grab [GR]
TKN [00625]	Report, mg/L [19]	Report, mg/L [19]	1/Quarter [01/90]	Grab [GR]
Total-N [00600]	Report, mg/L [19]	Report, mg/L [19]	1/Quarter [01/90]	Grab [GR]
pH (Standard Units) [00400]	6.0—9	.0 [12]	1/Quarter [01/90]	Grab [GR]

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

FOOTNOTES: See page 7 of this License. pH shall be between 6.0 and 9.0 S.U. at all times. Daily flows do not need to be measured when the egg processing facility is not being operated. The Monthly Average flow shall not include days when the facility is not being operated.

Note: Flow (effluent parameter) includes egg processing wastewater quantity from the SBR and sanitary wastewater from employees and visitors to the facility and shall be reported on the DMR sheet.

A. LIMITATIONS AND MONITORING REQUIREMENTS

2. Beginning the effective date of this license, GROUND WATER MONITORING WELLS: MW-1 North Well (Outfall #003A), MW-2 Middle Well (Outfall #003B), & MW-3 South Well (Outfall #003C) shall be limited and monitored as follows:

Monitoring Parameters	Daily <u>Maximum</u> as specified	Minimum Measurement <u>Frequency</u> as specified	Sample <u>Type</u> as specified
Depth to Water Level Below Landsurface	Report (feet) ⁽²⁾	1/Quarter (3)	Measure
[72019]	[27]	[01/90]	[MS]
Nitrate-Nitrogen	10 mg/L	1/Quarter ⁽³⁾	Grab
[00620]	[19]	[01/90]	[GR]
Ammonia-N	Report (mg/L)	1/Quarter ⁽³⁾	Grab
[00610}	[19]	[01/90]	[GR]
Specific Conductance	Report (umhos/cm)	1/Quarter ⁽³⁾	Grab
[00095]	[11]	[01/90]	[GR]
Temperature (°F)	Report (°F)	1/Quarter ⁽³⁾	Grab
[00011]	[15]	[01/90]	[GR]
PH (Standard Units)	Report (S.U.)	1/Quarter ⁽³⁾	Grab
[00400}	[12]	[01/90]	[GR]

FOOTNOTES: - See page 7 of this license

A. LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

<u>Footnotes</u> – [Special Conditions A(1), A(2)]

Sampling and analysis must be conducted in accordance with; a) methods approved in Title 40 *Code of Federal Regulations* (40 CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Human Services. Samples that are sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of the *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of 10-144 CMR 263.

Treatment System Effluent

1. The effluent shall be sampled from the 1,000 gallon septic tank after the sequencing batch reactor. Samples shall be representative of what is actually discharged to the subsurface wastewater disposal system. A report showing meter readings and daily flows in gallons per day shall be submitted with each Discharge Monitoring Report. Any change in sampling location must be approved by the Department in writing.

Groundwater Monitoring

- 2. 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.
- 3. Groundwater sampling shall be conducted during each calendar quarter during each calendar year. Sampling, handling and preservation shall be conducted in accordance with federally approved methods. Specific conductance, temperature and pH are considered to be "field" parameters and are to be measured in the field via instrumentation. Specific conductance values indicating a statistically significant trend upwards or sudden spikes from previous levels activities shall be reported promptly to the Department and may necessitate the need for additional groundwater testing requirements to determine causes and effects as related to spray irrigation. The licensee is required to test for these parameters whether or not wastewater was disposed of via the sub-surface disposal system.

B. TREATMENT PLANT OPERATOR

The person who has the management responsibility over the treatment facility must hold a **Grade II** certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Sewerage Treatment Operators*, Title 32 M.R.S.A., Sections 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the licensee may engage the services of the contract operator.

C. UNAUTHORIZED DISCHARGES

The licensee is authorized to discharge treated sanitary and egg processing wastewater only in accordance with: 1) the licensee's General Application for Waste Discharge Permit, accepted for processing on July 1, 2010; 2) the terms and conditions of this license; and 3) only from Outfall #002B. Discharges of wastewater from any other point sources are not authorized under this license, and shall be reported in accordance with Standard Condition B(5)(*Bypass*) of this license.

D. DISPOSAL OF TRANSPORTED WASTE INTO THE WASTEWATER TREATMENT FACILITY

The licensee is prohibited from accepting transported wastes for disposal into any part or parts of the wastewater disposal system. "Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.

E. NARRATIVE EFFLUENT LIMITATIONS

- 1. The effluent shall not contain materials in concentrations or combinations which would impair the uses designated by the classification of the ground water.
- 2. The effluent must not lower the quality of any classified body of water (ground water is a classified body of water under Title 38, Section 465-C) below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

F. NOTIFICATION REQUIREMENT

In accordance with Standard Condition #6, the licensee shall notify the Department of the following:

- 1. Any substantial change in the volume or character of pollutants being introduced into the treatment system. For the purposes of this section, notice regarding substantial change shall include information on:
 - (a) the quality and quantity of waste water introduced to the treatment system; and
 - (b) any anticipated impact caused by the change in the quantity or quality of the waste water to be introduced into the treatment system.

G. GENERAL OPERATIONAL CONSTRAINTS

- 1. The licensee shall operate the system consistent with the requirements of the *Maine Subsurface Wastewater Disposal Rules* (144A CMR 241 authorized under Title 22 MRSA §42) and other pertinent regulations, as well as the limitations of the design.
- 2. All upgrades, replacements or authorized expansions of the treatment systems shall be in accordance with *Maine Subsurface Wastewater Disposal Rules* and be approved by the Department.
- 3. The licensee shall maintain a file on the location of all system components and relevant features. Each component shall be mapped and field-located sufficiently to allow adequate inspections and monitoring by both the licensee and the Department. Septic tanks and distribution box covers shall be accessible for inspections and pumping. Risers shall be installed as necessary. See Special Condition K of the license.
- 4. All system components including collection pipes, tanks, distribution boxes, pumps, pumping stations, disposal fields, and manholes shall be identified and referenced by a unique system identifier in all logs and reports.

H. OPERATIONAL REQUIREMENTS

It shall be the responsibility of the licensee to ensure that:

1. Occurrences of excessive inflow and infiltration are corrected immediately. Ponding of surface water over the disposal field does not occur and all sources of surface water are diverted away from the fields.

H. OPERATIONAL REQUIREMENTS (CONT'D)

- 2. Driving or parking over any part of the system is prohibited, except in cases where weight-bearing components (H-20) have been installed and approved for use in the design. Covering the disposal field with a hard surface such as concrete or asphalt is prohibited. The field is kept free of woody vegetation and the digging or planting of anything other than grass or other similar herbaceous plants is prohibited.
- 3. Stockpiling of snow or soil on the disposal fields or soil excavation/stockpiling within 300 feet of the system or monitoring wells is prohibited.

I. SEPTIC TANKS

- 1. All septic tanks shall be watertight and tanks must be constructed of materials approved by the Department and in accordance with the *Maine Subsurface Wastewater Disposal Rules*. Metal septic tanks are prohibited.
- 2. Inlet and outlet connections of each septic tank or compartment shall be designed to obtain effective retention of scum and sludge. All connections and baffles shall be fastened with and constructed of, or coated with, materials that are resistant to corrosion.
- 3. Septic tanks and other treatment tanks shall be regularly inspected (as specified in Special Condition J) and maintained to ensure that they are providing best practicable treatment. Tank contents shall be removed whenever the sludge and scum occupies one-third of the tank's liquid capacity or whenever levels approach maximum design capacity, whichever is less.

J. LICENSEE INSPECTIONS

- 1. All inspections shall include an evaluation of any repair, upgrades, pumping, operational and/or maintenance needs. The inspection report or log shall include the date of the inspection, the name of the person(s) performing the inspection, and other relevant system observations.
- 2. Septic tank, distribution box, and Sequencing Batch Reactor tank inspections shall include: the approximate age, size, and condition of the tank (if changed from previously reported conditions); depth and location of the scum layer; depth and location of the sludge layer; solids % of capacity; physical condition of the baffles, inlet and outlet tees; evidence of significant leakage into or out of tank (water-tightness); evidence of backup of effluent; and cleaning of the effluent filter (if present).
- 3. Disposal field inspections shall include: any signs of hydraulic failure; condition of the surface vegetation; level of ponding within the chamber and on the disposal area; examination of texture and color or the adjacent soil; physical encroachments into the disposal area; and other sources of hydraulic loading. Evidence of system failure to note may

J. LICENSEE INSPECTIONS (cont'd)

- 4. include: sewage surfacing, sewage back-up, lush green growth, slow draining, sewage odors, sogginess or ponding.
- 5. Where practicable, the licensee shall maintain and keep logs that record water level measurements in disposal fields at least once per week. Significant changes in water levels over the previous year will be identified, recorded and reported to the Department.
- 6. The licensee shall perform inspections of the tanks at least once every year and twice per year of the leach field area. Inspections are to be conducted each time the tanks are pumped and more frequently for problem components or where required by the operations and maintenance manual.

K. MAINTENANCE LOGS

Maintenance logs shall be maintained for each system component including pumps, dosing chambers, distribution boxes, septic tanks and absorption fields. At a minimum the log shall include the alphanumeric ID, the date of maintenance, type or maintenance performed, names of persons performing the maintenance, volumes directed to each field and other relevant system observations.

L. PUMPING (SOLIDS REMOVAL FROM SEPTIC TANKS, DISTRIBUTION BOXES AND OTHER TREATMENT TANKS)

- 1. The licensee shall keep a pumping log including the date of pumping, quantity of material removed (solids % of capacity), name and number of licensed contractor, septage disposal location, and other relevant observations.
- 2. Following pumping, the tanks shall be checked for damage at key joints and the inlet and outlet baffles, and any damage must be repaired promptly.

M. SUBMITTAL OF ANNUAL SUBSURFACE SYSTEM PERFORMANCE REPORT

By January 31st of each calendar year (*PCS codes 90199, 90299, 90399, 90499, 90599*), the licensee shall submit to the Department for review and approval an annual report of the treatment system's performance covering the previous calendar year (January 1 to December 31) for **Outfall 002B**. The annual report shall include any standard reporting form(s) developed by the Department.

The annual report shall include, but is not necessarily limited to, the following:

1. A copy of the pump log for that year, including the date(s) the system was pumped, gallons pumped, tank condition (for the equalization tank, SBR, sludge storage tank, and distribution tank).

M. SUBMITTAL OF ANNUAL SUBSURFACE SYSTEM PERFORMANCE REPORT (cont'd)

- 2. A copy of the Inspection/Repair Log for that year including the date(s) of inspections, repairs, replacement or upgrade of any part of the system, including the date work was performed, description of the work, type of inspection, repair or upgrade, parts replaced or added, inspection results, and the contractor or person performing the work. Repairs/replacement included on the log shall include leach field bed inspections, tank inspections, additions or replacement of major system components such as pumps, piping, controllers, tanks, leach fields, etc.
- 3. Flow Report submittal of graphical depiction of the total flow for each month compared with the design of the system. Total flows for the current year compared with the previous five (5) years beginning in 2010.
- 4. Operations Summary overall summary of the names of operators, operators Waste Water Treatment Plant Grade level and status, system performance, proposed corrective actions and schedule for planned improvements, major changes to plant operation in the previous year and planned for the next year and planned repairs/upgrades for the following year. Describe any unlicensed discharges that occurred during the previous year and actions taken to clean up these discharges and prevent future discharges. The report shall be signed and dated by the certified treatment system operator in responsible charge for the system.

N. OPERATIONS AND MAINTENANCE (O & M) PLAN

This facility shall have a current written comprehensive Operation & Maintenance (O & M) Plan. The plan shall provide a systematic approach by which the licensee shall 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 shall evaluate and modify the O& M Plan including site plan(s) and schematic(s) for the wastewater treatment facility to ensure that it is up-to-date. The O& M Plan shall be kept on-site at all times and made available to the Department personnel upon request.

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

O. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and postmarked on or before the thirteenth (13th) day of the month or hand-delivered to 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 completed reporting period.

A signed copy of the DMR and all other reports required herein shall be submitted to the following address:

Maine Department of Environmental Protection Central Maine Regional Office Bureau of Land and Water Quality Division of Water Quality Management 17 State House Station Augusta, Maine 04333

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

P. REOPENING OF LICENSE FOR MODIFICATIONS

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 shall remain in full force and effect, and shall be construed and enforced in all respects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

MAINE WASTE DISCHARGE LICENSE

FACT SHEET

November 16, 2010

COMPLIANCE TRACKING NUMBER: MEU508103

LICENSE NUMBER: W008103-5P-C-R

NAME AND MAILING ADDRESS OF APPLICANT:

P.O. Box 298 Winthrop, ME 04364

COUNTY: Kennebec County

NAME AND ADDRESS OF FACILITY:

Dorothy Egg Farm, LLC 231 Turkey Lane Winthrop, ME 04364

RECEIVING WATER/ CLASSIFICATION: Groundwater/Class GW-A

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: John Lough

207-377-9927

Dorothyegg@ctel.net

CONTRACT OPERATOR: Robert Johnson

Wastewater Services

P.O. Box 6144

China Village, ME 04926

207-968-3304

Walden@waldeninc.com

1. APPLICATION SUMMARY:

The licensee has applied for a renewal of Waste Discharge License (WDL) #W008103-5P-B-R, which was issued on September 28, 2005 and expired on September 28, 2010. The previous WDL authorized the discharge of 3,000 gallons per day (gpd) of treated egg washing and sanitary wastewater from an egg packing plant to the groundwater, Class GW-A, via a sub-surface wastewater disposal system in Winthrop, Maine.

2. LICENSE MODIFICATION REQUESTED

The licensee is requesting a monitoring frequency reduction for Outfall #002 from monthly to quarterly.

3. LICENSE MODIFICATION GRANTED

The Department is reducing the monitoring frequency for Outfall #002 from monthly to quarterly for BOD5, TSS, Nitrate, Nitrite, Ammonia nitrogen, TKN, Total Nitrogen and pH.

4. LICENSE SUMMARY

- a. With the exception of the modifications noted above, this licensing action is carrying forward the terms and conditions of the previous licensing action.
- b. <u>Facility History</u>: This section provides a summary of significant licensing actions and milestones that have been completed for the licensee.

July 14, 2000 – The Department issued WDL #W008103-5P-A-N that authorized Dorothy Egg Farm to operate a subsurface waste water disposal system to treat and dispose of 3,000 gallons per day of sanitary and egg processing waste water in the Town of Winthrop.

September 25, 2005 – The Department issued WDL#W008103-5P-B-R for a five-year term.

June 14, 2010 – The licensee submitted an application for renewal of WDL# W008103-5P-B-R. The Department accepted the application on 7/01/10 and assigned WDL# W008103-5P-C-R

- c. <u>Source Description</u>: Wastewater is generated from egg washing, sanitation, equipment cleanup, and by employees and visitors to the site. There are no combined sewer overflow locations associated with the facility. The treatment system is not authorized to receive any septage from any source, including the on-site septic or pretreatment tanks for the egg processing plant.
- d. Wastewater Treatment: Egg processing wastewater and sanitary wastewater are separately conveyed to a 3,000 gallon wastewater equalization tank. From the equalization tank, flow is then conveyed to a sequencing batch reactor (SBR) on a continuous basis. The decant is pumped into a 1,000 gallon septic tank where compliance samples are collected. From the 1,000 gallon tank, the decant discharges onto the disposal fields consisting of four, 10' wide by 100' long leach beds over a 24-hour period in two distinct batches. The batches are controlled by time as a primary controlling measure and secondly by level should flows decrease or increase substantially above capacity. A turbidimeter is programmed to turn off the decant process if effluent turbidity is too high. The mixed liquor in the decant trips an alarm light and displays a message for the operator to turn on the sludge waste pump when the threshold has been reached. Waste activated sludge from the SBR is pumped into a 1,500 gallon sludge accumulation tank and eventually pumped out by a septage hauler. Any supernatant from the sludge accumulation tank is pumped back to the wastewater equalization tank.

4. LICENSE SUMMARY (cont'd)

e. <u>Septage handling</u>: The licensee has septage pumped from its own septic tanks on a three-year rotation. No septage is allowed to be disposed of in the treatment system and all septage must be disposed of at an off-site location.

5. CONDITIONS OF LICENSE

Conditions of Licenses, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in *Classification of ground water*, 38 M.R.S.A. §470.

6. RECEIVING WATER QUALITY STANDARDS

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

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

a. <u>Flow:</u> This licensing action is carrying forward a daily flow monitoring requirement and a discharge flow limitation of 3,000 gallons per day.

A review of the DMR data for the period August 2005 to August 2010 indicates the following:

Flow (Outfall #002B)

Value	Limit (gallons)	Range (gallons)	Average (gallons)	Number of DMRs	Compliance
Monthly Average	3000	688 – 2742	1524	54	100%
Daily Maximum	Report	1560 – 8660	2949	54	N/A

b. <u>Biochemical Oxygen Demand (BOD₅) & Total Suspended Solids (TSS):</u> Monitoring for BOD5 yields an indication of the condition of the wastewater being applied, alerts the operator to possible excessive loadings of organic material and demonstrates the effectiveness of the wastewater treatment process. This licensing action is carrying forward daily maximum BOD₅ and TSS concentration limits of 100 mg/L based on a Department best professional judgment (BPJ) of BPT. This licensing action is revising the BOD₅ and TSS monitoring frequency requirements based on the licensee's excellent compliance history and the monitoring requirements of similar licensees.

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

A review of the DMR data for the period August 2005 to August 2010 indicates the monthly average and daily maximum BOD₅ and TSS concentration values have been reported as follows:

BOD₅ concentration

Value	Outfall #	Limit (mg/L)	Range (mg/L)	Average (mg/L)	Number of DMRs	Compliance
Monthly Average	002B	100	<1 – 440	18	54	96%
Daily Maximum	002B	Report	<1 – 440	18	54	96%

TSS concentration

Value	Outfall #	Limit (mg/L)	Range (mg/L)	Average (mg/L)*	Number of DMRs	Compliance
Monthly Average	002B	100	<1 - 10,000	214	53	96%
Daily Maximum	002B	Report	<1 - 10,000	214	53	96%

*The licensee reported monthly average test results of 10,000 mg/L in 2006 and 760 mg/L in 2007 which increased the average results over the 5-year monitoring period. All other TSS results were below the monthly average limit.

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

c. Nitrate-nitrogen, Nitrite-Nitrogen, Ammonia-Nitrogen, and Total Kjeldahl Nitrogen (TKN): Nitrogen assumes different forms depending upon the oxidation-reduction conditions in the groundwater. The presence of a particular form of nitrogen indicates the nutrient attenuation capacity of the spray site. The Department considers the required monitoring for various forms of nitrogen in groundwater (Outfalls #003A-Monitoring Well #1, #003B-Monitoring Well #2, #003C-Monitoring Well #3) to provide accurate and sufficient analysis of site conditions and effects from the treatment process. Nitrogen compounds can indicate human health concerns if elevated in a drinking water supply. The 10 mg/L limit for nitrate nitrogen in monitoring wells is based on state and federal drinking water standards. This licensing action is revising the monitoring frequency requirements for these parameters based on the licensee's excellent compliance history and the monitoring requirements of similar licensees.

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

A review of the DMR data for the period August 2005 to August 2010 indicates the following:

Nitrate Nitrogen

Value	Outfall #	Limit (mg/L)	Range (mg/L)	Average (mg/L)	Number of DMRs	Compliance
Monthly Average	002B	Report	<0.2 – 67	16	52	N/A
Daily Maximum	002B	Report	<0.2 – 67	16	52	N/A
Daily Maximum	003A	10	1 – 6	3	19	100%
Daily Maximum	003B	10	1 – 7	3	19	100%
Daily Maximum	003C	10	1 – 2	1	13	100%

Nitrite Nitrogen

Value	Outfall #	Limit (mg/L)	Range (mg/L)	Average (mg/L)	Number of DMRs	Compliance
Monthly Average	002B	Report	0.05 - 21	1	52	N/A
Daily Maximum	002B	Report	0.05 - 21	1	52	N/A

Ammonia Nitrogen

Value	Outfall #	Limit (mg/L)	Range (mg/L)	Average (mg/L)	Number of DMRs	Compliance
Monthly Average	002B	Report	<0.05 – 24	2	53	N/A
Daily Maximum	002B	Report	<0.05 – 24	2	53	N/A
Daily Maximum	003A	Report	<0.2 – 1	0.3	19	N/A
Daily Maximum	003B	Report	<0.2 – 1	0.3	19	N/A
Daily Maximum	003C	Report	<0.2 – 0.4	0.2	13	N/A

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

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Total Kjeldahl Nitrogen

Value	Outfall #	Limit (mg/L)	Range (mg/L)	Average (mg/L)	Number of DMRs	Compliance
Monthly Average	002B	Report	<1 - 660	18	53	N/A
Daily Maximum	002B	Report	<1 - 660	18	53	N/A

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

d. Specific Conductance, Temperature and PH: These three parameters are considered to be "field" parameters meaning that they are measured directly in the field via instrumentation and do not require laboratory analysis. They are considered surveillance parameters that are used as early-warning indicators of potential groundwater contamination. This licensing action carries forward the existing quarterly (1/Quarter) reporting requirements for these compounds for Outfalls #003A-Monitoring Well #1, #003B-Monitoring Well #2, #003C-Monitoring Well #3. This licensing action is revising the pH monitoring frequency requirement for Outfall #002B based on the licensee's excellent compliance history and the monitoring requirements of similar licensees.

A review of the DMR data for the period August 2005 to August 2010 indicates the following:

Specific Conductance

Value	Outfall #	Limit (umhos/cm)	Range (umhos/cm)	Average (umhos/cm)	Number of DMRs	Compliance
Daily Maximum	003A	Report	227 – 737	365	19	N/A
Daily Maximum	003B	Report	140 – 361	275	19	N/A
Daily Maximum	003C	Report	110 – 176	134	13	N/A

Temperature

Value	Outfall #	Limit (Deg F)	Range (Deg F)	Average (Deg F)	Number of DMRs	Compliance
Daily Maximum	003A	Report	40 – 64	52	19	N/A
Daily Maximum	003B	Report	38 – 72	53	19	N/A
Daily Maximum	003C	Report	44 – 59	52	13	N/A

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

pН

Value	Outfall #	Limit (mg/L)	Range (mg/L)	Number of DMRs	Compliance
Daily Maximum	002B	6.0 – 9.0	6.5 - 8.5	53	100%
Daily Maximum	003A	Report	6.1 – 7.1	19	N/A
Daily Maximum	003B	Report	6.1 - 7.0	19	N/A
Daily Maximum	003C	Report	5.3 – 6.8	13	N/A

e. <u>Depth to water level below landsurface:</u> Measuring the distance from the ground level to the groundwater surface in monitoring wells will be used to monitor representative groundwater conditions. This licensing action carries forward the existing quarterly reporting requirements (1/Quarter) for Outfalls #003A-Monitoring Well #1, #003B-Monitoring Well #2, #003C-Monitoring Well #3.

A review of the DMR data for the period August 2005 to August 2010 indicates the following:

Depth to Water Level Below Landsurface

Value	Outfall #	Limit (Feet)	Range (Feet)	Average (Feet)	Number of DMRs	Compliance
Daily Maximum	003A	Report	19 – 20	19	17	N/A
Daily Maximum	003B	Report	19 – 25	22	18	N/A
Daily Maximum	003C	Report	2 – 6	3	11	N/A

8. MAINTAIN ADEQUATE BUFFERS AND LAND FOR REPLACEMENT

The licensee is expected to provide adequate buffers from other land uses, and retain, where possible, land for system expansion or replacement.

9. 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.

10. PUBLIC COMMENTS

Public notice of this application was made in the *Kennebec Journal* on or about September 27, 2010. 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).

11. DEPARTMENT CONTACTS

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

Phyllis A. Rand Division of Water Quality Management Bureau of Land & Water Quality Department of Environmental Protection 17 State House Station

Augusta, Maine 04333-0017 Telephone: (207) 287-7658 Fax: (207) 287-3435

e-mail: phyllis.a.rand@maine.gov

12. RESPONSE TO COMMENTS

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

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD CONDITIONS OF INDUSTRIAL WASTE DISCHARGE LICENSES

1. General Conditions

- A. All discharges shall be consistent with the terms and conditions of this license; 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 license; it shall be a violation of the terms and conditions of this license 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 license.
- B. The licensee shall permit the Department of Environmental Protection Staff upon the presentation of proper credentials:
 - To enter upon licensee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this license;
 - 2) To have access to and copy any records required to be kept under the terms and conditions of this license;
 - 3) To inspect any monitoring equipment or monitoring method required in this license; or,
 - 4) To measure and/or sample at any intake, process or cooling effluent stream, wastewater treatment facility, and/or outfall.
- C. This license shall be subject to such monitoring requirements as may be reasonably required by the Department of Environmental Protection including the installation, use, and maintenance of monitoring equipment or methods (including, where appropriate, biological monitoring methods). The licensee shall provide the Department of Environmental Protection with periodic reports on the proper Department of Environmental Protection reporting form of monitoring results obtained pursuant to the monitoring requirements contained herein.
- D. This license does not preclude obtaining other required Federal, State, or Municipal permits and does not authorize or approve the construction of any onshore physical structures or facilities or the undertaking of any work in any navigable waters.
- E. The issuance of this license does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights nor any infringement of Federal, State or local laws or regulations.
- F. Nothing in this license shall be construed to relieve the licensee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond his control, such as accident, equipment breakdown, labor dispute, or natural disaster.

2. Treatment Plant Operator

The Treatment Facility must be operated by a person holding a Grade T, II, III, IV, V certificate pursuant to 32 M.R.S.A., Section 4171 et seq. 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.

3. Disinfection

Disinfection shall be used to reduce the concentration of bacteria to or below the level specified in the "Effluent Limitations and Monitoring Requirement" section of this license. If chlorination is used as a means of disinfection, an approved contact chamber shall be provided. The chlorine residual in the effluent shall at no time cause any demonstrable harm to aquatic life in the receiving waters. A positive chlorine residual shall be maintained at all times as required by this license, however, at no time shall the total chlorine residual of the effluent exceed 1.0 mg/l:

4. Wastewater Treatment and Sampling Facilities

- a. The licensee shall collect all waste flows designated by the Department of Environmental Protection 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 licensee shall at all times maintain in good working order and operate at maximum efficiency all wastewater 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 an specifications must be submitted to the staff of the Department of Environmental Protection and approved prior to the construction or modification of any treatment facilities.
- e. The licensee shall install flow measuring facilities of a design approved by the Department of Environmental Protection.
- f. The licensee must provide an outfall of a design approved by the Department of Environmental Protection which is placed in the receiving waters in such a manner that maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

5. Monitoring and Reporting

a. 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 licensee 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.

b. The sampling, preservation, handling, and analytical methods used must conform with Standard Methods for the Examination of Water and Wastewaters, American Public Health Association, 1015 18th Street, N.W., Washington, D.C. 20036, latest approved edition, or methods referenced in 40 CFR Part 136, Guidelines Establishing Test Procedures for Analysis of Pollutants. However, different but equivalent methods are allowable if they receive the prior written approval from the Department of Environmental Protection.

c. Reporting

(1) The results of the above monitoring requirements shall be reported on reporting forms supplied by the department in the units specified at a frequency of once:

yearly semi-annually quarterly monthly

- (2) All reports shall be submitted to the Department by not later than the tenth of the month following the end of the monitoring period.
- (3) Any reports or records of monitoring activities and results shall include for all samples: (a) the date, exact place, and time of sampling; (b) the dates and times analyses; (d) the analytical techniques/methods used, including sampling, handling, and preservation techniques; and (e) the results of all required analyses.

- d. All reports shall be signed by:
- (1) In the case of corporations, by a principal executive officer of at least the level of vice president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the reporting form originates.
- (2) In the case of a partnership, by a general partner or duly authorized representative.
- (3) In the case of a sole proprietorship, by the proprietor or duly authorized representative.
- (4) In the case of a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or duly authorized employee.
- (e) All monitoring reports and future correspondence regarding monitoring facilities should be directed to:

Bureau of Water Quality Control
Department of Environmental Protection
State House Station #17
Augusta, Maine 04333

6. Non-Compliance Notification

- a. In the event the licensee bypasses collection or treatment facilities or is unable to comply with any of the conditions of this license due, among other reasons, to:
 - 1. breakdown of waste treatment equipment;
 - 2. accidents caused by error or negligence;
 - 3. high strength, high volume or incompatible wastes, or
 - 4. other causes such as acts of nature,

the licensee shall notify the Department of Environmental Protection verbally as soon as its agents have knowledge of the incident.

- b. Within five (5) days of becoming aware of such condition the licensee shall provide the Department of Environmental Protection in writing, the following information:
 - 1. A description of the discharge and cause of noncompliance; and
 - 2. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

- c. If the licensee knows in advance of changes in licensed facilities or activities which may result in non-compliance or of the need to bypass, it shall submit prior notice at least ten days in advance of such occurance.
- d. In the event a bypass is due to inflow or infiltration of uncontaminated water into a sewer system, reporting requirements may be adjusted by the Department to a monthly basis.

7. Change of Discharge

The licensee shall notify the department in writing as soon as it has knowledge of any significant changes or proposed changes in its discharge, including but not limited to:

- a) the temporary or permanent termination of the discharge;
- b) changes in the waste collection, treatment or disposal facilities;
- c) changes in the volume or character of wastewater flows;
- d) permanent changes in industrial production rates;
- e) the proposed addition, directly or indirectly, of toxic pollutants not authorized by the license or reflected in the application filed with the department;
- f) the addition to a municipal or quasi-municipal treatment system of industrial wastes which are categorically regulated by the U.S. EPA pursuant to the agency's pretreatment program.

8. Transfer of Ownership

In the event that any person possessing a license issued by the Department shall transfer the ownership of the property, facility or structure which is the source of a licensed discharge, without transfer of the license being approved by the Department, the license granted by the Department shall continue to authorize a discharge within the limits and subject to the terms and conditions stated in the license, provided that the parties to the transfer shall be jointly an severally liable for any violation thereof until such time as the Department approves transfer or issuance of a waste discharge license to the new owner. The Department may in its discretion require the new owner to apply for a new license, or may approve transfer of the existing license upon a satisfactory showing that the new owner can abide by its terms and conditions.

9. Records Retention

All records and information resulting from the monitoring activities required by this license including all records of analyses performed and calibration and maintenance of instrumentation shall be retained for a minimum of three (3) years.

10. 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

- (1) 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
- (2) known to be hazardous or toxic by the licensee.
- b. The discharge of such materials will not violate applicable water quality standards.

11. Removed Substances

Solids, sludges, trash rack cleanings, filter backwash, or other pollutants removed from or resulting from the treatment or control of wastewaters shall be disposed of in a manner approved by the Department of Environmental Protection.

12. Bypass of Waste Treatment Facilities

The diversion or bypass of any discharge from facilities utilized by the licensee to maintain compliance with the terms and conditions of this license is prohibited, except (1) where unavoidable to prevent loss of life or severe property damage, or (2) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the terms and conditions of this license. The licensee shall notify the Department of Environmental Protection of each such diversion or bypass in accordance with the procedure specified in paragraph 6 above for reporting non-compliance. It is the duty of the licensee to take all feasible steps to prevent, minimize and mitigate bypasses. If infiltration or inflow of stormwater or groundwater contribute to bypasses, the licensee shall submit to the department for approval, a wet weather flow management plan. The plan shall describe measures implemented to maximize the volume of flow through the treatment facilities and the efficiency of the treatment process. Submission of this plan shall not remove any responsibilities of the licensee pursuant to paragraph 6.

13. Emergency Action--Electric Power Failure

In order to maintain compliance with the effluent limitations and prohibitions of this license, the licensee shall either:

- maintain an alternative power source sufficient to operate the wastewater control facilities; or
- b. Halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

14. Spill Prevention and Containment

The licensee shall within six (6) months of the effective date of this license submit to the Department of Environmental Protection a spill prevention plan. Said plan shall delineate methods and measures to be taken to prevent and or contain any spills of pulp, chemicals, oils or other contaminants and shall specify means of disposal and/or treatment to be practiced.

15. Connection to Municipal Treatment System

All wastewaters designated by the Department of Environmental Protection as treatable in a municipal treatment system will be consigned to a municipal treatment system when said system becomes available. This waste discharge license will automatically expire 90 days after a municipal facility becomes available unless this time is extended by the Department, in writing, for good cause shown.

16. Pretreatment

The licensee shall comply with all Federal Statutes, regulations, and conditions of permits applicable to its discharge of wastewaters, including, but not limited to, those requiring the installation of pretreatment facilities or establishment of pretreatment programs.

DEFINITIONS

FOR THE PURPOSE OF THIS LICENSE THE FOLLOWING SHALL APPLY

- A. Grab Sample: An individual sample collected in a period of less than 15 minutes.
- B. Composite Sample: A sample consisting of a minimum of eight grab samples collected at equal intervals during a 24-hour period (or a lesser period if specified in the section on Monitoring and Sampling) and combined proportional to flow or a sample continuously collected proportionally to flow over the same time period.
- C. Daily Maximum For Concentration: The maximum value not to be exceeded at any time.
- D. Daily Maximum For Quantity: The maximum value not to be exceeded during any day.
- E. Weekly or Monthly Average: The sum of all daily samples measurement or test results made during a week or month divided by the number of tests or measurement made during the respective time period. Exception: bacteriological tests shall be calculated as a geometric mean.
- F. Bypass: The diversion of wastewater, either by act or by design, from any portion of a treatment facility or conveyance system.