AUTHORIZATION TO OPERATE AND DISCHARGE
UNDER THE LAWS OF THE
STATE OF DELAWARE

Permittee: **Mountaire Farms of Delaware, Inc.**
P.O. Box 1320, 29292 John J. Williams Hwy
Millsboro, Delaware 19966

Facility: **Mountaire Farms of Delaware, Inc.**
Wastewater Treatment Facility
29106 John J. Williams Hwy
Millsboro, Delaware 19966

Treating: Poultry processing wastewater, stormwater, and sanitary waste

Discharge: Spray irrigation of treated effluent via a center pivot irrigation system onto spray irrigation fields north of State Route #24 "WHBJ" and to areas south of State Route #24 "Center Block System" consisting of a combined approximate 893 acres.

1. Pursuant to the provisions of 7 Del. C. §6003, the Permittee is herein authorized to operate the above referenced wastewater treatment facility and to discharge treated wastewater via spray irrigation.

2. The Delaware Department of Natural Resources & Environmental Control's (the Department or DNREC) purpose in issuing this Permit, and in imposing the requirements and conditions specified herein, is for the protection of public health and the environment as required by 7 Del. Admin. C. §7101 *Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems* (the Regulations). The effluent limitations, monitoring requirements and other permit conditions are set forth herein.

John J. Rebar, Jr.
Environmental Program Manager I
Groundwater Discharges Section
Delaware Department of Natural Resources
and Environmental Control

01-11-2021
Date Signed

LOCATION MAP

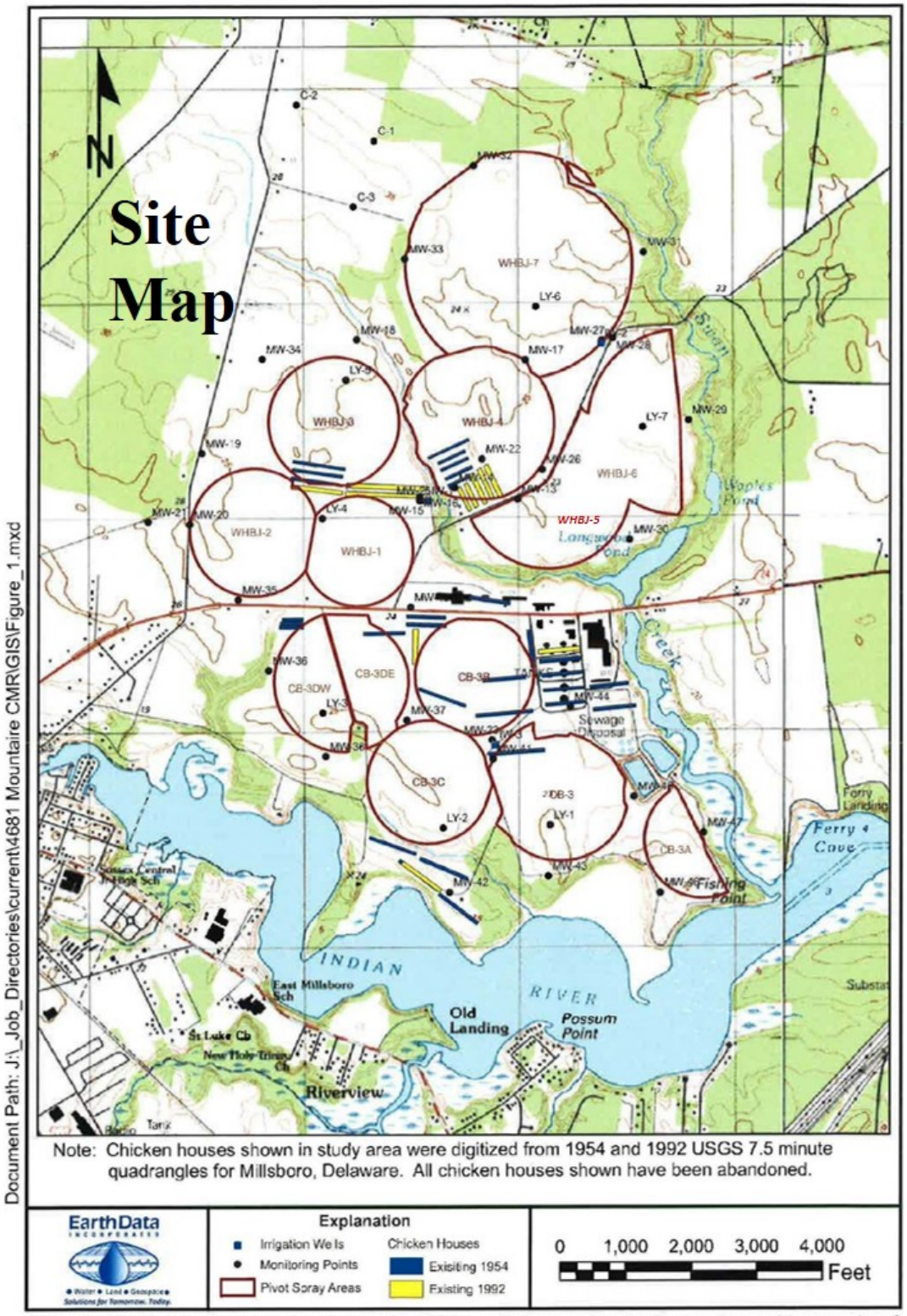


Figure 1: USGS 7.5 minute quadrangle map for Millsboro, Delaware showing the location and topography of the site and surrounding area (created 1954, Photorevised 1992)

Surface Water Monitoring Locations

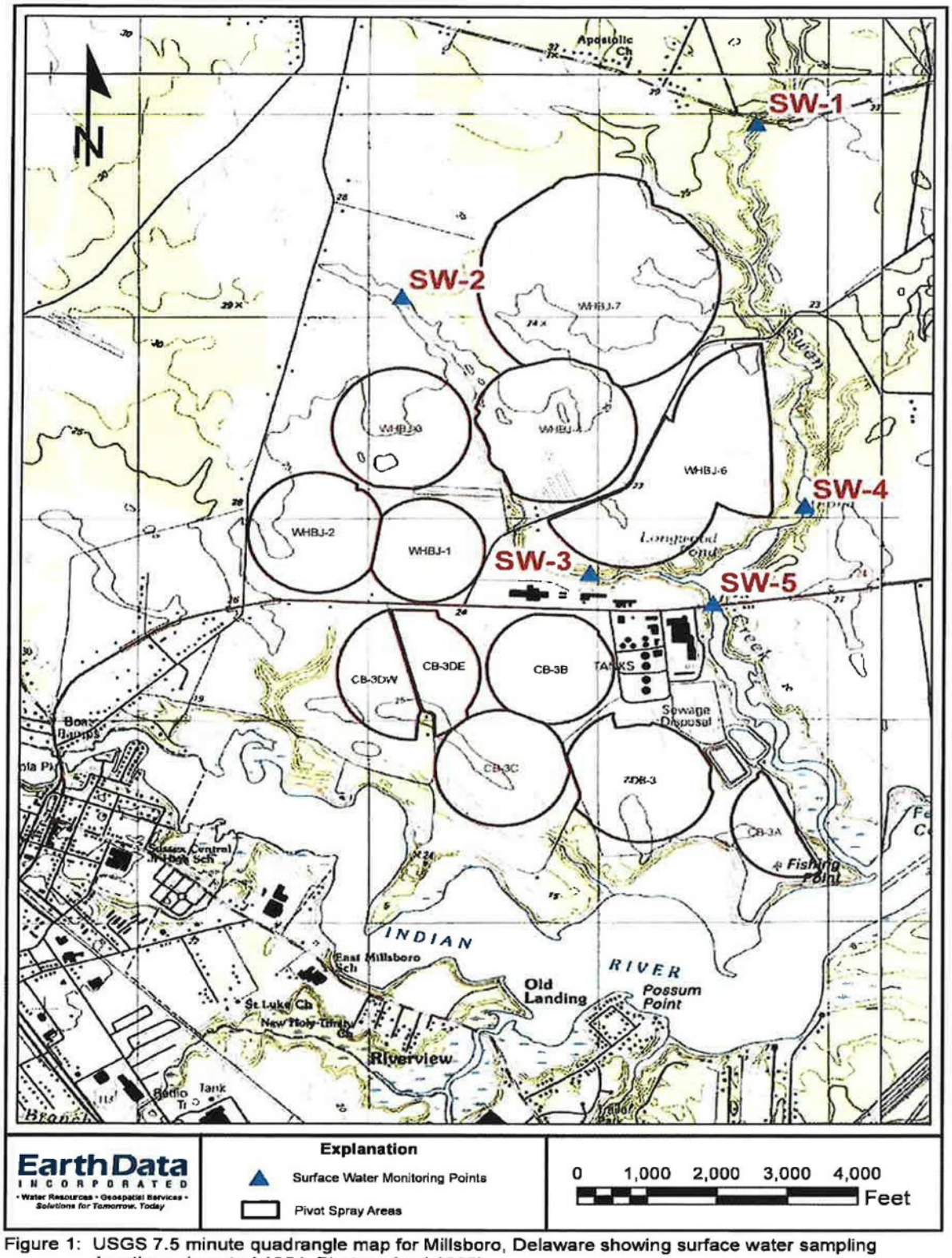
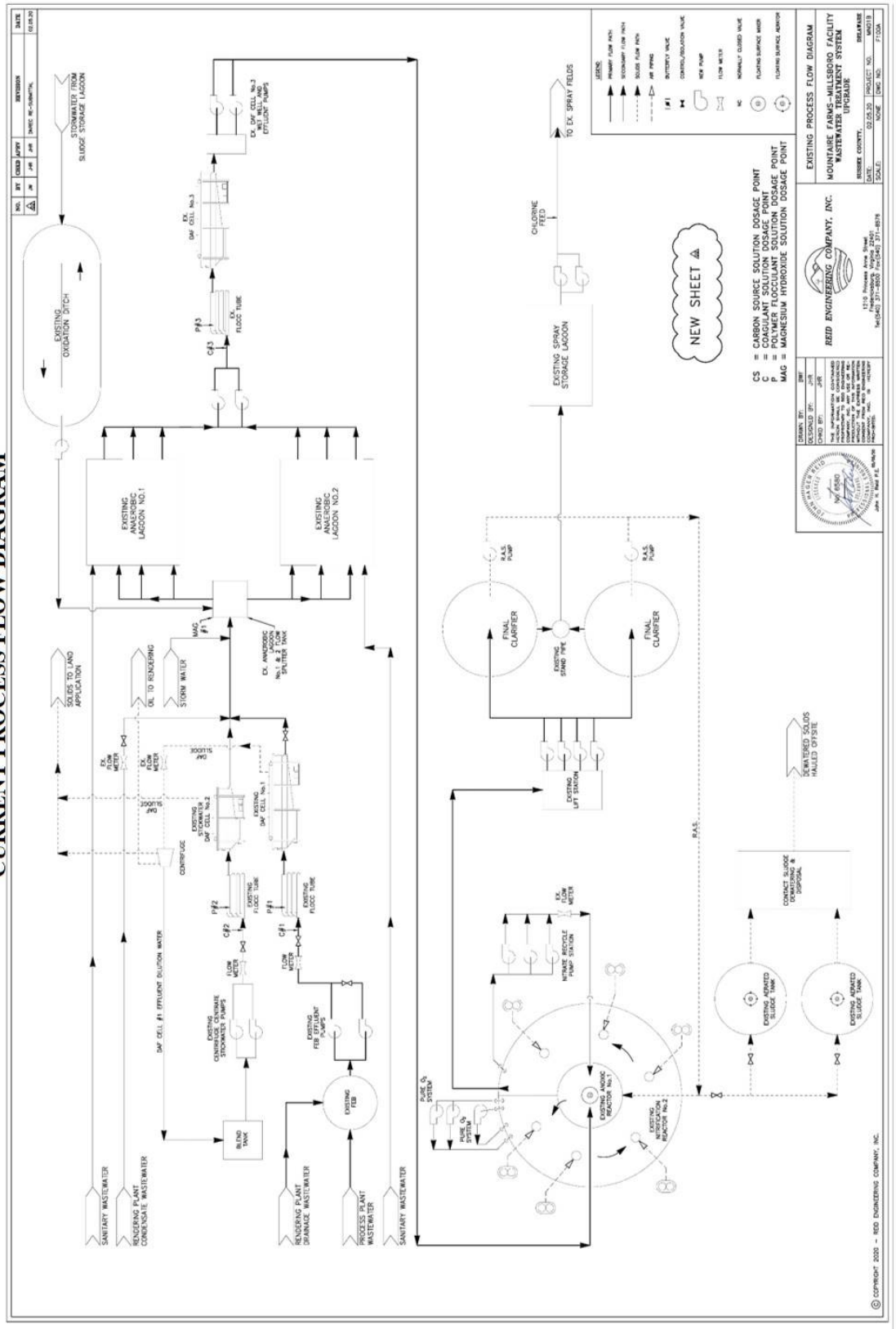
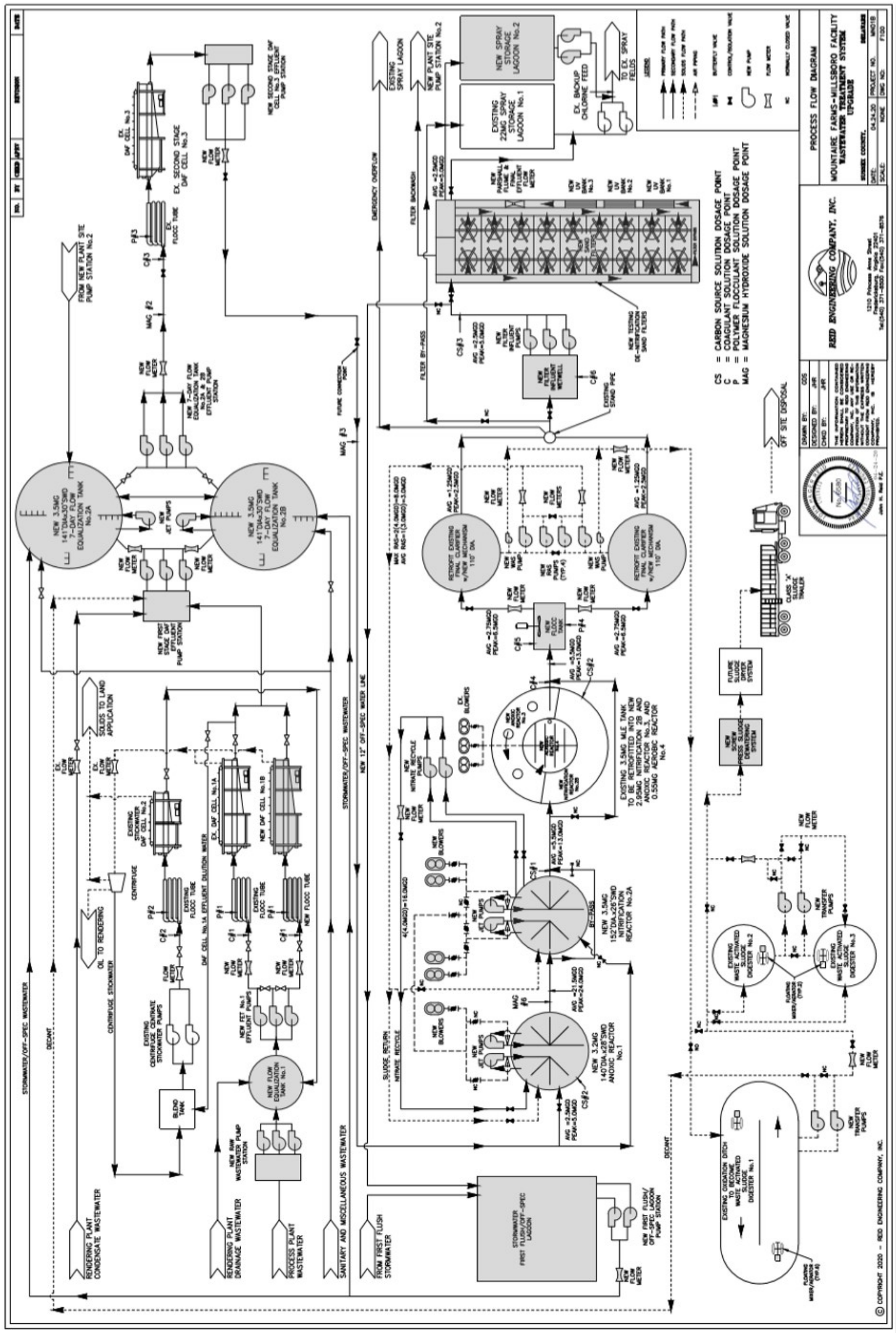


Figure 1: USGS 7.5 minute quadrangle map for Millsboro, Delaware showing surface water sampling locations. (created 1954, Photorevised 1992)

CURRENT PROCESS FLOW DIAGRAM



POST UPGRADE CONSTRUCTION PROCESS FLOW



PART I

A. GENERAL DESCRIPTION OF OPERATIONS/DISCHARGES

The wastewater treatment facility is designed to receive and treat poultry processing wastewater, stormwater, and sanitary wastewater. Treated wastewater is discharged via spray irrigation.

Pre-Construction Wastewater Treatment Facility

Prior to the completion of construction upgrades in accordance with State Permit DEN Number: 359191-05, the current treatment process includes the following elements: primary and secondary screening, equalization tank, dissolved air flotation (DAF), anaerobic lagoon biological treatment/equalization (two lagoons), activated sludge biological treatment with biological nutrient reduction capability – Modified Ludzack-Ettinger (MLE), post-anaerobic DAF, secondary clarification (two units), sludge digestion and thickening, disinfection (chlorination) and a post-treatment spray irrigation storage lagoon.

Post-Construction Upgraded Wastewater Treatment Facility

After the completion of construction upgrades in accordance with State Permit DEN Number: 359191-05, the treatment process will include the following elements: primary and secondary screening, flocculation, dissolved air flotation (DAF), anaerobic lagoon biological treatment/equalization, anoxic reactors, nitrification reactor, aerobic reactor, secondary clarification, sand filtration, disinfection (UV with back-up chlorination), a stormwater first/flush/off-spec lagoon, and post-treatment spray irrigation storage lagoons. The treatment process will also include waste activated sludge digestion and a screw press sludge dewatering system.

The treated wastewater (effluent) will be spray irrigated onto approximately 893 acres. Seven center pivot spray irrigation systems are located north of State Route #24 and are designated as WHBJ Systems Nos. 1, 2, 3, 4, 5, 6, and 7. In addition, six center pivot spray irrigation systems are located south of Route #24 and are designated as Center Block Systems Nos. 3, 3A, 3B, 3C, 3DE, and 3DW. The fields will continue to be maintained in corn, small grains (barley and wheat), and soybeans.

North Spray Fields	
Field Wetted	**Wetted Area (acres)**
WHBJ – 1	54.29
WHBJ – 2	65.33
WHBJ – 3	78.00
WHBJ – 4	76.84
WHBJ – 5	64.42
WHBJ – 6	72.91
WHBJ – 7	199.54
South Spray Fields	
Field Wetted	**Wetted Area (acres)**
Center Block 3	40.84
Center Block 3A	28.97
Center Block 3B	64.24
Center Block 3C	64.72
Center Block 3D East	41.56
Center Block 3D West	41.97

B. DOCUMENTATION

The application consists of the documents submitted by the Permittee and materials contained in the administrative record prior to the issuance of this Permit. This includes (but not limited to) the following information.

Documentation associated with the pre-construction wastewater treatment facility.

1. December 7, 2010 Design Development Report Addendum 2011 Wastewater Treatment Improvements submitted by Cabe Associates Inc.
2. November 15, 2011 Drawings submitted by Cabe Associates Inc.
3. 2012 Operation and Maintenance Manual
4. November 2, 2017 Notice of Violation (W-17-GWD-13)
5. December 13, 2019 Agreement and [Proposed] Consent Decree

Additional documentation associated with the post-construction upgraded wastewater treatment facility.

1. February 5, 2020 Construction Permit Application prepared by Reid Engineering Company, Inc. on behalf of Mountaire Farms of Delaware, Inc. consisting of a Final Design Summary, Technical Specifications, and Drawings
2. February 7, 2020 Request for Permit Modification Letter
3. April 24, 2020 Revised Construction Permit Application prepared by Reid Engineering Company, Inc. on behalf of Mountaire Farms of Delaware, Inc. consisting of a Final Design Summary, Process Flow Diagrams, and Drawing Index for Revisions
4. April 27, 2020 Wastewater Treatment Facility Primary Treatment Upgrades Email from Reid Engineering Company Inc.

C. INFLUENT LIMITATIONS

1. The monthly average influent to the wastewater treatment facility shall not exceed 2.6 million gallons per day (MGD) in any calendar month calculated as total monthly volume divided by the number of days in the month.

   The connection of additional units or waste streams other than those indicated in the approved design documents referenced in Part I.B is prohibited without prior written approval from the Groundwater Discharges Section.

   Design Treatment Capacity: 2.6 MGD Monthly Average [calculated as Total Monthly Volume divided by the number of days in the month]

D. SPRAYED EFFLUENT LIMITATIONS

During the period beginning on the effective date and lasting through the expiration date of this Permit, the Permittee is authorized to discharge to the spray irrigation field(s) identified on Page 1, in Part I.A, and depicted on Page 3 of this Permit the quantity and quality of effluent specified below and in accordance with the design documents listed in Part I.B of this Permit.

1. Total Nitrogen Concentration

   Within 2 years and 4 months of the effective date of this Permit, treated wastewater (effluent) discharged from the wastewater treatment system shall not exceed the following maximum limitation.

   Total Nitrogen: 10 mg/L

2. Total Phosphorus Concentration

   Within 3 years and 4 months of the effective date of this Permit, treated wastewater (effluent) discharged from the wastewater treatment system shall not exceed the following maximum limitation.

   Total Phosphorus: 3.0 mg/L

3. The monthly average quantity of effluent discharged from the wastewater treatment facility to the spray fields shall not exceed 2.6 million gallons per day (MGD) calculated as total monthly volume divided by the number of days in the month.

4. The average weekly quantity of effluent discharged to any portion of the spray irrigation field shall not exceed the following hydraulic loading limitation measured as inch per acre averaged over a 7-day rolling period.

North Spray Fields	
Field Wetted	**Hydraulic Loading Limit (inches/week)[1]**
WHBJ – 1	1.5
WHBJ – 2	2.5
WHBJ – 3	1.5
WHBJ – 4	2.5
WHBJ – 5	1.5
WHBJ – 6	2.5
WHBJ – 7	2.5
South Spray Fields	
Field Wetted	**Hydraulic Loading Limit (inches/week)[1]**
Center Block 3	2.3
Center Block 3A	2.5
Center Block 3B	2.5
Center Block 3C	2.2
Center Block 3D East	2.5
Center Block 3D West	2.5

[1]Earth Data Inc. Report dated December 16, 2019

5. The quantity of effluent discharged to any portion of the spray irrigation field shall not exceed 0.25 inch/acre/hour.

6. There shall be a minimum of a three-hour rest period between applications of effluent to the spray fields when the center pivot systems (WHBJ 4, 5, 6, Center Block 3A, 3D east and west) contact any permanent end stop. On all other spray fields, there shall be an appropriate rest period between applications to prevent field saturation and runoff from occurring in any part of the field.

7. The wastewater treatment facility has been designed for limited public access. Treated wastewater (effluent) utilized for limited public access sites shall meet the following daily permissible average concentrations.
   a) The 5-day Biochemical Oxygen Demand (BOD_5) of the treated wastewater shall not exceed 50 mg/L.
   b) Disinfection of wastewaters containing domestic waste is required to yield a discharge not to exceed 200 col/100 mL Fecal Coliform.
   c) The treated wastewater shall not contain more than 50 mg/L of Total Suspended Solids (TSS).

   The daily average concentration shall be determined by the summation of all the measured daily concentrations obtained from composite samples divided by the number of days during the calendar month when the measurements were made.

Parameter	Daily Permissible Average Concentration
BOD_5	50.0 mg/L
Fecal Coliform	200 colonies/100 mL
Total Suspended Solids	50 mg/L

8. The pH of the effluent shall not be less than 5.5 standard units nor greater than 9.0 standard units at any time.

9. The total residual chlorine concentration shall not be less than 1.0 mg/L nor more than 4.0 mg/L at any time when chlorination (instead of UV) is used for disinfection purposes.

10. The effluent discharged to the spray irrigation fields shall be free from material such as floating solids, sludge deposits, debris, scum, oil and grease.

11. Application of Fertilizer

    The application of nitrogen and phosphorus commercial fertilizers on the spray fields is prohibited without written authorization from the Groundwater Discharges Section. Any requests for applying fertilizer shall be submitted with relevant crop analysis lab data, a Nitrogen Balance signed and sealed by a Delaware Class C licensed Professional Engineer demonstrating that the application of treated wastewater and fertilizer will not exceed 10 mg/L on a monthly basis in the percolate, and the written recommendation of a Delaware Certified Crop Advisor.

    In addition, commercial phosphorus fertilizer applications will be limited to starter fertilizer for corn if soil tests demonstrate that it is necessary (Jan. 2015 CMR - Soils Recommendations Page 9).

E. FACILITY CLASSIFICATION

1. A classification was performed on the permitted facility in accordance with the *Regulations for Licensing Operators of Wastewater Facilities* (7 DE Admin. Code 7204). The wastewater treatment facility is designated as a Class IV Facility. The facility shall be under the direction of a Class IV Licensed Operator in Direct Responsible Charge for the facility who is always available. A licensed operator, operating under the direction of the licensed operator in Direct Responsible Charge for the facility, shall also be available when the spray irrigation system is in operation.

F. BUFFER REQUIREMENTS

Buffer zones shall be maintained in accordance with Section 6.3.2.3.10 of the Regulations unless otherwise specified below.

1. A buffer zone of at least 50 feet shall be maintained between the edge of the wetted field area and all highways, individual lots, and property lines.
2. A buffer zone of 50 feet shall be maintained between the wetted edge of the spray field and the edge of any wetlands or any perennial lake or stream provided that the buffer zone is maintained in perennial vegetation, otherwise a buffer zone of 100 feet shall be maintained.
3. Spray irrigation of treated wastewater in the reduced buffer areas along Route #24 and County Road 304 shall only occur during daylight hours.

G. SLUDGE HANDLING REQUIREMENTS

1. The Permittee shall properly manage all solids generated by the treatment system to maintain effective operation by removing solids as necessary in accordance with accepted process control methods. Solids

removed from the treatment process shall be contained, transported, and disposed of in accordance with all local, state, and federal regulations. The Permittee shall maintain records of solids disposal.

2. Records of solids disposal, including the volume of solids removed, and copies of all manifests for the previous calendar year shall be submitted to DNREC in the Annual Report.

H. FACILITY SPECIFIC CONDITIONS

1. The Permittee shall maintain a weather station to track the wind direction to ensure that no spray drift occurs to roadways during irrigation. If wind conditions are such that spray drift could occur over roadways, then all spray irrigation activities shall cease on those fields.

2. The irrigation pump station shall be kept free from accumulated solids, debris or sludge deposits.

3. Use of the spray irrigation system for the application of pesticide products shall be conducted in accordance with approved standards for sprinkler chemigation.

4. The Permittee shall perform an annual Phosphorus Site Index and provide results in the Annual Report.

5. Relocated production wells in zones with elevated groundwater Nitrate-Nitrogen concentrations shall be utilized as soon as practicable but no later than the initiation of the operation of the upgraded treatment system.

6. Total Nitrogen Limitation Contingency Plan

   Upon enacting the maximum Total Nitrogen concentration limitation of 10 mg/L, if analytical results of a treated wastewater sample indicate an exceedance of the Total Nitrogen limitation, the Permittee shall collect and analyze a second sample within 24 hours of becoming aware of the original exceedance. If the second sample results indicate that the maximum Total Nitrogen limitation is continuing to be exceeded, the following contingency plan shall be enacted.

   a) The Permittee shall notify the Groundwater Discharges Section within 24-hours after becoming aware of the second exceedance and submit a copy of the analytical results indicating the exceedances.
   b) The Permittee shall increase the frequency of Total Nitrogen treated wastewater sampling to once daily and submit weekly results to the Groundwater Discharge Section.
   c) The Permittee shall examine the operation and maintenance log, required to be maintained by this Permit, for any possible improper operational procedures.
   d) The Permittee shall conduct a physical inspection of the treatment system to detect abnormalities. Any abnormalities discovered shall be corrected. A report detailing the corrections made shall be submitted to the Groundwater Discharge Section within 30 days of correction.
   e) The Permittee shall follow their emergency contingency plan and submit monthly TN balances indicating that they can continue spray irrigation at higher concentrations while not exceed 10 mg/L on a monthly basis in the percolate.

   When daily analytical results from three consecutive weeks of wastewater sampling do not exceed the limitation, the Permittee is authorized to return to a bi-weekly monitoring frequency.

   Upon completion of the off-spec lagoon as authorized by State Permit DEN Number 359191-05, if a Total Nitrogen exceedance is confirmed, the Permittee shall notify the Department to determine if treated wastewater is required to be diverted. If required, the Permittee shall immediately cease discharging to the spray fields and divert treated wastewater to the off-spec lagoon for temporary storage and additional treatment.

7. Fecal Coliform Bacteria Limitation Contingency Plan

If analytical results of a treated wastewater sample collected at the irrigation pivot indicate an exceedance of the daily average concentration limitations for fecal coliform bacteria set by this Permit (i.e., confirmed exceedance), the contingency plan below shall be enacted.

Within 24 hours of becoming aware of a confirmed exceedance (as identified above), the Permittee shall:

a) notify the Groundwater Discharges Section that the contingency plan is being enacted;
b) submit copies of the recent analytical results indicating an exceedance;
c) begin post-storage lagoon chlorination
d) submit weekly analytical sampling results to the Groundwater Discharge Section;
e) examine the operation and maintenance log, required to be maintained by this Permit, for any possible improper operational procedures; and
f) conduct a physical inspection of the treatment system to detect abnormalities. Any abnormalities discovered shall be corrected. A report detailing the corrections made shall be submitted to the Groundwater Discharge Section within 30 days of correction.

When analytical results indicate that the daily average concentration limitations for fecal coliform bacteria set by this Permit is no longer being exceeded, the Permittee can cease submitting weekly results.

Upon completion of the off-spec lagoon as authorized by State Permit DEN Number 359191-05, if a fecal coliform bacteria exceedance is identified, the Permittee shall notify the Department to determine if treated wastewater is required to be diverted. If required, the Permittee shall immediately cease discharging to the spray fields and divert treated wastewater to the off-spec lagoon for temporary storage and additional treatment.

If a facility is required to enact the contingency plan more than three times in a 12-month period, the Permittee shall have the system evaluated to determine the cause of the elevated fecal coliform bacteria concentrations and submit a revised Design Engineer Report with proposed corrective actions to achieve a maximum fecal coliform bacteria concentration of 200 col/100 mL that bears the seal and signature of a Class C licensed Delaware Professional Engineer to the Groundwater Discharges Section. The report shall be submitted within one year of the third notification of the contingency plan being enacted. The Permittee shall initiate implementation of the plan within 90 days following approval by the Groundwater Discharges Section.

PART II

A. MONITORING REQUIREMENTS

During the period beginning on the effective date and lasting through the expiration date of this Permit, the Permittee is authorized to discharge to spray irrigation fields identified on Page 1, in Part I.A, and depicted on Page 3 of this Permit. Such discharge shall be monitored by the Permittee as specified herein.

Requests for monitoring modifications shall be submitted to the Department's Groundwater Discharges Section in writing. Such requests shall clearly state the reason for and nature of the proposed modification and, where applicable, shall contain supporting scientific information, analysis, and justification. Requests will be addressed by the Department on a case by case basis.

1. INFLUENT MONITORING REQUIREMENTS

The Permittee shall sample combined flows from anaerobic lagoon 1 and anaerobic lagoon 2 until the construction upgrades required by Part I.C.2 of State Permit DEN Number 359191-05 are completed. At that time, samples shall be collected in the Department approved influent sampling location/port as required by Part II.B.1 of State Permit DEN Number 359191-05.

The Permittee shall submit a spreadsheet summarizing the influent analytical results with the Monthly DMR.

Parameter	Unit of Measurement	Monitoring Frequency	Sample Type
Flow	Gallons/Day	Continuous	Recorded
BOD_5	mg/L	Monthly	Grab
TSS	mg/L	Monthly	Grab
Total Nitrogen	mg/L	Monthly	Grab
Ammonia Nitrogen	mg/L	Monthly	Grab
Nitrate/Nitrite as Nitrogen	mg/L	Monthly	Grab
pH	S.U.	Monthly	Grab
Total Phosphorus	mg/L	Monthly	Grab
Chloride	mg/L	Monthly	Grab

2. SPRAYED EFFLUENT MONITORING REQUIREMENTS

Samples taken in compliance with the monitoring requirements for Fecal Coliform, Oil and Grease, Total Dissolved Solids, and Total Residual Chlorine (as needed) shall be collected at the spray irrigation pivot.

Samples taken in compliance with the monitoring requirements for pH and all composite sampling shall be collected at the effluent end of the final clarifiers until the construction upgrades required by Part I.C.2 of State Permit DEN Number 359191-05 are complete. At that time, samples taken in compliance with the monitoring requirements for pH and all composite sampling shall be collected in the Department approved effluent sampling location/port as required by Part II.B.2 of State Permit DEN Number 359191-05.

All analytical results shall be submitted to the Department in Monthly DMRs.

Parameter	Unit Measurement	Monitoring Frequency	Sample Type
Ammonia Nitrogen	mg/L	Monthly	Composite
BOD_5	mg/L	Twice per month[2]	Composite
Cadmium	mg/L	Annually	Composite
Calcium	mg/L	Annually	Composite
Chloride	mg/L	Quarterly	Composite
Copper	mg/L	Annually	Composite
Effluent Flow	Gal/day	Continuous	Recorded
Fecal Coliform	Col/100 ml	Twice per month[2]	Grab
Lead	mg/L	Annually	Composite
Magnesium	mg/L	Annually	Composite
Nickel	mg/L	Annually	Composite
Nitrate + Nitrite Nitrogen	mg/L	Monthly	Composite
Oil and Grease	mg/L	Monthly	Grab
Organic Nitrogen	mg/L	Monthly	Calculation
pH	S.U.	Daily	Grab
Potassium	mg/L	Quarterly	Composite
Sodium Adsorption Ratio	N/A	Quarterly	Calculation
Sodium	mg/L	Quarterly	Composite
Total Dissolved Solids	mg/L	Quarterly	Grab
Total Nitrogen[1]	mg/L	Twice per month[2]	Composite
Total Nitrogen Loading	lbs/acre	Monthly	Calculation
Total Phosphorus	mg/L	Monthly	Composite
Total Phosphorus Loading	lbs/acre	Monthly	Calculation
Total Residual Chlorine	mg/L	Daily	Grab
Total Suspended Solids	mg/L	Twice per month[2]	Composite
Zinc	mg/L	Annually	Composite

[1] Until the construction upgrades are complete in accordance with Part I.C.2 of the State Permit DEN Number 359191-05, the Permittee shall continue the current enhanced monitoring frequency as required by the Department.

[2] Samples shall be taken 14 days apart.

Additionally, the Permittee shall provide the following information.

Parameter	Unit Measurement	Monitoring Frequency	Sample Type
Total Effluent Flow to all Fields/Zones/Pivots combined	Gallons	Monthly	Data
Max Daily Effluent Flow to all Fields/Zones/Pivots combined	Gallons	Monthly	Data
Average Daily Effluent to all Fields/Zones/Pivots combined	MGD or gpd	Monthly	Calculation (Total Monthly Effluent Flow / Number of Days in Month)
Total Effluent Flow to each Fields/Zones/Pivots	Gallons	Monthly	Data
Number of Days Sprayed During the Month to each Fields/Zones/Pivots	Days	Monthly	Data
Nitrogen Loading Rate to each Fields/Zones/Pivots	lbs/acre per Field/Zone/Pivot	Monthly	Calculation
Cumulative Annual Nitrogen Loading Rate to each Fields/Zones/Pivots	lbs/acre per Field/Zone/Pivot	Monthly	Calculation
Phosphorus Loading Rate to each Fields/Zones/Pivots	lbs/acre per Field/Zone/Pivot	Monthly	Calculation
Cumulative Annual Phosphorus Loading Rate to each Fields/Zones/Pivots	lbs/acre per Field/Zone/Pivot	Monthly	Calculation

3. GROUNDWATER MONITORING REQUIREMENTS

Groundwater samples shall be taken from each monitoring well for the facility. The current monitoring well locations are depicted on the Site Map found on Page 3 of this Permit. Please note that additional monitoring wells will be required to be installed in accordance with State Permit DEN Number 359191-05.

Samples taken in compliance with the monitoring requirements specified shall be taken at each monitoring well in accordance with procedures approved by the Department.

Groundwater monitoring results for each monitoring well shall be reported using the State of Delaware Well Identification Tag Number that is required on all wells in accordance with the Delaware *Regulations Governing the Construction and Use of Wells*, Section 10 A.

All field sampling logs and laboratory results for samples obtained from a well shall be identified by the DNREC ID affixed to the well.

Groundwater samples shall be tested from the following wells for the following parameters.

Local ID	DNREC ID	Field		Local ID	DNREC ID	Field
MW-13	243364	WHBJ-5		MW-31	70662	WHBJ-7
MW-14	243361	WHBJ-4		MW-32	70663	WHBJ-7
MW-15	243359	WHBJ-4/5		MW-33	70664	WHBJ-7
MW-16	243358	WHBJ-1		MW-34	70665	WHBJ-3
MW-17	243357	WHBJ-4/7		MW-35	70666	WHBJ-2
MW-18	243356	WHBJ-3		MW-36	70667	CB-3DW
MW-19	243355	WHBJ-2		MW-37	70668	CB-3B/C/D
MW-20	243354	WHBJ-2		MW-38	192056	CB-3DW
MW-21	243353	WHBJ-2		MW-40	70671	WHBJ-1
MW-22	243362	WHBJ-4		MW-41	70672	CB-3/B/C
MW-23	243365	CB-3/B/C		MW-42	70673	CB-3C
MW-25	243351	Next to 15		MW-43	70674	CB-3
MW-26	243363	WHBJ-4		MW-44	70675	CB-3
MW-27	243352	WHBJ-7		MW-45	70676	CB-3/3A
MW-28	70659	WHBJ-6		MW-46	70677	CB-3A
MW-29	70660	WHBJ-6		MW-47	70678	CB-3A
MW-30	70661	WHBJ-6				

Parameter	Unit Measurement	Measurement Frequency	Sample Type
Ammonia as Nitrogen	mg/L	Quarterly	Grab
Arsenic	mg/L	Quarterly	Grab
Chloride	mg/L	Quarterly	Grab
Depth to Water	hundredths of a foot	Quarterly	Field Test
Dissolved Oxygen	mg/L	Quarterly	Field Test
Fecal Coliform	Col/100mL	Quarterly	Grab
Nitrate + Nitrite as Nitrogen	mg/L	Quarterly	Grab
pH	S.U.	Quarterly	Field Test
Sodium	mg/L	Quarterly	Grab
Specific Conductance	µS/cm	Quarterly	Field Test
Temperature	°C	Quarterly	Field Test
Total Dissolved Solids	mg/L	Quarterly	Grab
Total Nitrogen	mg/L	Quarterly	Grab
Total Phosphorus	mg/L	Quarterly	Grab

Whenever, a new monitoring well is installed, the Permittee shall take immediate samples in compliance with the monitoring requirements specified above and in accordance with procedures approved by the Department.

a) Groundwater monitoring results for each new monitoring well shall be reported using the State of Delaware Well Identification Tag Number that is required on all wells in accordance with the Delaware *Regulations Governing the Construction and Use of Wells*, Section 10 A.
b) All field sampling logs and laboratory results for samples obtained from a well shall be identified by the DNREC ID affixed to the well.
c) Initial groundwater results shall be submitted to the Groundwater Discharges Section within 45 days of sample collection and monitoring wells shall be sampled in accordance with the parameters and frequency specified above from that point forward.

4. GROUNDWATER TABLE ELEVATION MONITORING REQUIREMENTS

While performing the monitoring as required by Part II.A.3 of this Permit, if the 'Depth to Water' in any one of the monitoring wells has reached within 3 feet of the ground surface, the Permittee shall be required to collect additional weekly depth to water measurements from the monitoring wells within 3 feet of the ground surface. The additional monitoring is necessary to ensure that spray irrigation ceases on any areas of the spray fields where the groundwater may reach within 2 feet of the ground surface in accordance with Part III.A.5 of this Permit. The Permittee may discontinue the additional weekly sampling for depth to water in a well when the groundwater table elevation readings in the well exceeds a 3-foot separation between groundwater and ground surface. The additional groundwater table elevation measurements shall be recorded in the operator's log and reported to the Groundwater Discharges Section in accordance with Part II.B.2 of this Permit.

5. LYSIMETER MONITORING REQUIREMENTS

Samples shall be taken from each lysimeter for the facility. Lysimeter locations are depicted on the Site Map found on Page 3 of this Permit. Any new lysimeter installed during this Permit term shall also be sampled as required by this Permit.

Samples be tested from the following wells for the following parameters. The constituents are listed below in highest priority first. If enough sample volume may not be obtained to test for all parameters listed, the sample shall be tested for as many constituents possible in the following order.

Local ID	DNREC ID	Associated Pivot	Notes
LY-1	257012	CB-3	Replaced well 233818 on 02/07/17
LY-2	257636	CB-3C	Replaced well 233819 on 03/29/17
LY-3	257016	CB-3DW	Replaced well 233820 on 02/07/17
LY-4	233821	WHBJ-1	
LY-5	233822	WHBJ-3	
LY-6	233823	WHBJ-7	
LY-7	233824	WHBJ-6	

Parameter	Unit Measurement	Measurement Frequency	Sample Type
Total Nitrogen	mg/L	Monthly	Grab
Total Phosphorus	mg/L	Monthly	Grab
Nitrate + Nitrite as Nitrogen	mg/L	Monthly	Grab
Ammonia as Nitrogen	mg/L	Monthly	Grab
Chloride	mg/L	Monthly	Grab
Sodium	mg/L	Monthly	Grab
Total Dissolved Solids	mg/L	Monthly	Grab
pH	S.U.	Monthly	Field Test
Specific Conductance	µS/cm	Monthly	Field Test
Temperature	°C	Monthly	Field Test

6. SOIL MONITORING REQUIREMENTS

Composite soil samples representing each soil series within the wetted spray field shall be taken separately from both soil depths of 0–12 inches and 12–24 inches. A minimum of three composite samples for each of the depths (0–12 inches and 12–24 inches) is required for every 20 acres of each soil series. The composite soil sampling shall represent the average conditions in the sampled body of material. The discrete samples that are to be composited shall be collected from the same soil horizon and depth interval.

Each soil sample location shall be plotted on a scaled drawing and labeled consistent with the sample nomenclature. Each field shall also be identified so that sample results may be tracked and properly assessed for field life limiting factors.

Soil chemical testing should be in accordance with Methods of Soil Analysis published by the American Society of Agronomy, Madison, Wisconsin.

If a Compliance Monitoring Report (CMR) is required for the facility, testing for Cadmium, Nickel, Lead, Zinc and Copper should be performed approximately one year prior to permit renewal so results may be utilized by the Permittee in the CMR. Reference Part IV.A.3 of the Permit and Section 6.5.4 of the Regulations regarding CMR requirements.

Parameter	**Unit Measurement**	**Measurement Frequency**	**Sample Type**
pH	S.U.	Annually	Soil Composite
Organic Matter	%	Annually	Soil Composite
Phosphorus (as P_2O_5)	mg/kg	Annually	Soil Composite
Potassium	mg/kg	Annually	Soil Composite
Sodium Adsorption Ratio	meq/100g	Annually	Soil Composite
Arsenic	mg/kg	Once per 5 years	Soil Composite
Cadmium	mg/kg	Once per 5 years	Soil Composite
Nickel	mg/kg	Once per 5 years	Soil Composite
Lead	mg/kg	Once per 5 years	Soil Composite
Zinc	mg/kg	Once per 5 years	Soil Composite
Copper	mg/kg	Once per 5 years	Soil Composite
Cation Exchange Capacity	meq/100g	*Only if soil pH changes significantly	Soil Composite
Phosphorus Adsorption (Mehlich 3 acceptable)	meq/100g	**Only if soil phosphorus levels become excessive for plant growth	Soil Composite
Percent Base Saturation	%	*Only if soil pH changes significantly	Soil Composite

*A significant change in soil pH is defined as a change of one or more standard units from the original value established in the Design Development Report.

** Excessive levels of soil phosphorus are defined by the Delaware Nutrient Management Commission. Soil phosphorus levels shall be tested in accordance with the University of Delaware soil testing methods (Gartley, 2002). If the soil phosphorus levels become excessive, the Permittee shall perform a Phosphorus Site Index (PSI) study. The results shall be submitted to the Groundwater Discharges Section within 30 days of completion. Based on these, the Groundwater Discharges Section may require the Permittee to submit a plan for detailing steps to reduce the phosphorus loading rates at the site.

7. VEGETATION MONITORING

A minimum of one composite sample for each field is required upon each harvest for each crop type annually.

Parameter	Unit Measurement	Measurement Frequency	Sample Type
Yield	Bushels/acre and lbs/acre	Annually - Per crop type per harvest	Vegetation Composite
Nitrogen	% and lbs/acre	Annually - Per crop type per harvest	Vegetation Composite
Phosphorus	% and lbs/acre	Annually - Per crop type per harvest	Vegetation Composite
% Moisture	%	Annually - Per crop type per harvest	Vegetation Composite

8. OPERATIONS MONITORING REQUIREMENTS

a. Spray Field Applications

Parameter	Unit Measurement	Monitoring Frequency	Sample Type
Fertilizer Nitrogen	lbs/acre per field/zone/pivot	Monthly	Reported
Fertilizer Phosphorus	lbs/acre per field/zone/pivot	Monthly	Reported

b. Treatment System

Parameter	Sample Location	Unit Measurement	Monitoring Frequency	Sample Type
Lagoon Levels	Lagoons	Feet of depth of lagoon	Weekly	Field Test

9. SURFACE WATER MONITORING REQUIREMENTS

Surface Water samples shall be obtained from the five locations as approximately depicted on the Site Map found on Page 4 of this Permit and listed below.

The geographic coordinates of the surface water sampling locations were determined and are as follows:

Local ID	Location Type	Water Body	Northings	Eastings
SW-1	Upstream	Swan Creek	69152.576	69152.576
SW-2	Upstream	Longwood Creek	68292.426	68292.426
SW-3	Downstream	Longwood Creek	66926.088	66926.088
SW-4	Downstream	Waples Pond	67260.127	67260.127
SW-5	Downstream	Longwood Pond	66776.152	66776.152

Coordinates are in NAD 1988 Delaware State Plane (Meters).

Surface Water Monitoring results for each monitoring point shall be reported using the established geographic coordinates.

A downgradient sample for a surface water body should be taken first, immediately followed by the upgradient location for the same surface water body. Followed by, the downgradient sample for the next surface water body being taken third, immediately followed by sampling of the upgradient location for this same surface water body. All samples should be taken on the same day and shall account for any tidal influence.

Surface Water sampling should not occur within three days of a measurable rainfall event to ensure that the streams have returned to base flow, groundwater dominant, conditions.

Monitoring results shall be reported with a cumulative analysis performed by a certified professional.

Parameter	Unit Measurement	Measurement Frequency	Sample Type
Ammonia as Nitrogen	mg/L	Quarterly	Grab
BOD_5	mg/L	Quarterly	Grab
Chloride	mg/L	Quarterly	Grab
Dissolved Oxygen	mg/L	Quarterly	Field Test
Enterococcus	Col/100mL	Quarterly	Grab
Fecal Coliform	Col/100 ml	Quarterly	Grab
Nitrate + Nitrite as Nitrogen	mg/L	Quarterly	Grab
Total Nitrogen	mg/L	Quarterly	Grab
Total Phosphorus	mg/L	Quarterly	Grab
Total Suspended Solids	mg/L	Quarterly	Grab

B. MONITORING SPECIFICATIONS AND REPORTING REQUIREMENTS

1. Representative Sampling

Samples and measurements taken as required in the Operations Permit shall be representative of the volume and nature of the monitored discharge. If there has been significant increase (> 25%) in the characterization of any one parameter of the effluent wastewater as established in the Design Engineer Report, the Permittee shall resample the wastewater and submit the additional analyses to the Department. The Permittee shall re-characterize the wastewater to determine if a change in treatment is required and/or if the land limiting constituent has changed. If a change in treatment is required and/or if the land limiting constituent has changed, a revised Design Engineer Report shall be submitted to the Department. After a review of these results, the Department may invoke the provisions of Part V.A.1 of this Permit.

2. Reporting

Monitoring results obtained during the previous one month/quarter shall be summarized and reported on an approved monitoring report form(s) postmarked no later than the 28th day of the month following the completed reporting period. Laboratory analytical results and sampling logs shall be submitted with the corresponding month's monitoring report. Signed reports/forms, laboratory analytical results, laboratory sampling logs and field data sheets shall be submitted in one complete package to the Department at the following address:

Groundwater Discharges Section
Division of Water
Department of Natural Resources and Environmental Control
89 Kings Hwy
Dover, DE 19901
(302) 739-9948 Office

The Department may provide written requirements for the permittee to submit monitoring data electronically. Upon notification from the Department, the Permittee shall transition (as directed) to the Department's electronic database system. The submission may need to be electronically signed.

3. Monitoring results reported as less than the detectible limit shall be reported with the less than symbol "<" before the detection limit. The full detection limit value shall be utilized in any necessary calculations. The less than symbol shall be carried through the calculation. The resulting value shall include any appropriate less than or greater than symbol resulting from the calculation.

4. Additional Monitoring by Permittee

   If the permittee monitors any parameter at the location(s) designated herein more frequently than required, using approved analytical methods, the results shall be reported to the Groundwater Discharges Section on an approved monitoring report form. Such increased frequency shall also be indicated.

5. Annual Report

   The Permittee shall submit to the Groundwater Discharges Section an Annual Report summarizing the operations, management, administration and maintenance of the facility for the calendar year. The Annual Report shall be submitted to the Groundwater Discharges Section on or before February 28th of each year. The Annual Report shall include all applicable items found in Section 6.8.2.4.1.3 and Section 6.9 of the Regulations. The Annual Report shall also include the calibration documentation required by Part III.A.15 of this Permit; records of solids disposal as required by Part I.G.2 and the annual phosphorus Site Index as required by Part I.H.4 of this Permit.

6. Test Procedures

   Test procedures for analysis of pollutants shall conform to the applicable test procedures identified in 40 CFR, Part 136 or the most recently adopted copy of Standard Methods unless otherwise specified in this permit.

7. Recording of Results

   For each measurement or sample taken pursuant to the requirements of this Permit, the Permittee shall record the following information:

   a. The exact place, date and time of sampling and/or measurement;
   b. The person(s) who performed the sampling and/or measurement;
   c. The date(s) the analyses were performed and the time the analyses were begun;
   d. The person(s) who performed the analyses; and
   e. The results of each analysis.

8. Records Retention

   All records and information resulting from the monitoring activities required by this Permit or the Regulations including all records of performed analyses, calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation shall be retained for five years. This period of retention shall be extended automatically in the event of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the Permittee or as requested by the Department.

9. Availability of Reports

   All reports prepared in accordance with the terms of this Permit shall be available for public inspection at the offices of the Department. Monitoring data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in 7 Del. C., §6013.

10. Operator Log

    An operator log shall always be kept onsite. Each spray system section shall be numbered and referred to by number in the operator log. All records and reports shall always also be kept in a bound logbook onsite and shall be made available upon request for review by the Department. This log shall, at a minimum, include the applicable items listed in Section 6.7.3 of the Regulations.

11. Quality Assurance Practices

    The Permittee is required to show the validity of all monitoring data by requiring its laboratory to adhere to quality assurance practices in accordance with Section 6.8.2.4 of the Regulations.

PART III

A. OPERATIONAL REQUIREMENTS

1. Duty to Comply

   The Permittee shall comply with all the terms and conditions of this Permit.

   The discharge of any pollutant more frequently than, or at a level in excess of that identified and authorized herein, shall constitute a violation of the terms and conditions of this Permit. The violation of any influent/effluent limitation or of any other condition specified in this Permit is a violation of 7 Del. C. Chapter 60 and is grounds for enforcement as provided in 7 Del. C., Chapter 60 "Enforcement; civil and administrative penalties; and expenses.", "Criminal Penalties." and "Cease and desist order." for Permit termination or loss of authorization to discharge pursuant to this Permit, for Permit revocation and reissuance, or Permit modification, or denial of a Permit renewal application. The Department may seek voluntary compliance by way of warning, notice or other educational means, pursuant to 7 Del. C., Chapter 60 "Voluntary compliance." or any other means authorized by Law. However, the Law does not require that such voluntary means be used before proceeding by way of compulsory enforcement.

2. Groundwater Requirements

   The operation of the wastewater treatment facility and spray irrigation system shall not cause the quality of Delaware's groundwater resources to be in violation of applicable Federal or State Drinking Water Standards.

3. Facilities Operation

   The Permittee shall properly maintain and operate all structures, pipelines, systems and equipment for collection, treatment control and monitoring which are used by the permittee to achieve compliance with the terms and conditions of the Permit. Proper operation and maintenance may include, but is not limited to, effective performance based on designed facility removals, adequate funding, effective management, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures.

4. The spray irrigation fields shall be managed to assure at a minimum that:

   a. Spray irrigation of wastewater shall only occur on fields being prepared for planting or already planted with a crop and shall not occur on fields with crops not actively growing or on voluntary vegetation.

   b. The spray fields shall be maintained in such a manner as to prevent wastewater pooling and/or discharge of wastewater to any surface waters. Should pooled areas become evident, spraying on those areas shall be prohibited until saturated conditions no longer exist.

   c. Aerosols or nuisance odors shall not extend beyond the boundary of the spray irrigation site when treated wastewater is being applied. If aerosols are not contained within the site or if odors are produced that are considered a public nuisance, within 30 days the Permittee shall submit a corrective action plan to alleviate aerosol migration and odors for Department review and approval. All action taken shall be reported to the Department in accordance with this Permit.

   d. Erosion controls shall be employed to prevent wastewater runoff from the spray irrigation fields. The Permittee shall notify the Department immediately if any wastewater runoff occurs.

   e. The spray irrigation field's crops shall be maintained in optimal condition, including any necessary weed management, reseeding, or other vegetative management practices.

   f. Effective vegetative management shall be provided such that crops harvested on the spray irrigation sites are removed from the sites.

g. Forage crops shall be harvested and removed from the irrigation field(s) as appropriate. Crops harvested shall be removed from the irrigation site within six (6) months of harvest.

h. The wastewater shall be applied in a manner such that the application is even and uniform over the irrigation area.

5. Spray irrigation is prohibited when saturated or frozen soil conditions exist.

6. The groundwater mound created by the added infiltration shall at no time reach within two feet of the ground surface in any section of the spray irrigation fields. Should the groundwater mound exceed this limit, the Permittee shall cease all irrigation of wastewater to the affected fields until the groundwater mound recedes to acceptable levels.

7. Connections or additions to the spray irrigation system other than those indicated on the approved plans are prohibited without prior approval from the Department's Groundwater Discharges Section.

8. Roof downspouts, foundation drains, area drains, storm sewers, combined sewers or appurtenances thereto or any sewer or device carrying storm water shall not be connected to the spray irrigation system unless accounted for in the wastewater treatment system design.

9. The Permittee shall take appropriate measures to protect the spray irrigation system from damage because of sub-freezing conditions.

10. Any leaks shall be reported to the Department and repaired immediately.

11. Signs

    a. Limited Public Access: Signs shall be posted on all limited public access spray fields utilized to irrigate treated wastewater to prohibit public contact. The signs shall indicate that the water being irrigated is treated wastewater. The signs shall be legible. Limited public access sites shall have signs posted on the perimeter every 1,000 feet, at a minimum, and at all entry points. Unlimited public access sites must have signs posted at all entry points.

12. Potable ground or surface water may be used for distribution system testing and irrigation to establish vegetation when appropriate treated effluent is not available.

13. Phased Systems

    a. Once an operation permit has been issued and the wastewater flow reaches 80% of the permitted treatment capacity for the constructed phase based on a period of seven (7) consecutive days, the Permittee shall submit written notification to the Department. The written notification shall include a work plan for construction of the next permitted phase. The Permittee shall submit a construction permit application, plans and specifications and Design Engineer Report with applicable fees if the next phase has not yet been permitted or if there are changes to the previously permitted design.

    b. Any flow above the permitted flow for a phase shall not be allowed to be discharged to the system until construction is completed on the following phase and an operating permit has been issued or amended by the Department for the next phase.

14. If the Permittee installs new monitoring wells or replaces any existing monitoring wells, the Permittee shall submit to the Department's Groundwater Discharges Section new elevation details relative to the common benchmark previously established.

15. The Permittee shall calibrate all flow meters in accordance with the Manufacturer's recommendations. Calibration shall include, but not be limited to influent, effluent, continuous online turbidity and chlorine residual monitors. The calibration documentation shall be submitted with the Annual Report in accordance with this Permit.

16. The Permittee shall operate and maintain wastewater treatment and disposal system in accordance with the approved Operation and Maintenance Plan (O&M). A copy of the O&M shall always be onsite. The Permittee shall maintain the O&M's accuracy and applicability in accordance with both their Permit and the Regulations. In the event of a discrepancy between the O&M and the Permit or Regulations, the requirements of the Permit and the Regulations would govern.

17. At least two feet of freeboard, measured vertically from the lowest point of the berm, is required for all storage lagoons. The lowest point of the berm shall be determined and marked.

    The Permittee shall notify the Department's Groundwater Discharges Section in writing prior to utilizing the freeboard in any storage lagoon or immediately upon unexpected encroachment into freeboard. In the event of encroachment into freeboard, Permittee shall contact the Groundwater Discharges Section to coordinate relief measures. In the event of an emergency, Permittee may verbally contact the Department; however, written notification shall subsequently be provided within five days of encroachment.

18. If the facility does not treat sewage and has a storage tank that requires cleanout, and if the Permittee intends to land apply material collected from the cleanout onto the spray irrigation field, the Permittee shall analyze the material for nutrients and any other applicable parameters of concern as determined by the Groundwater Discharges Section Prior to tank cleanout being performed. Permittee shall submit to the Groundwater Discharges Section a report including the results, the frequency and estimated volume of material to be applied, and how and where it will be applied. The report shall include a mathematical analysis determining any nitrogen loading from the tank cleaning combined with nitrogen loading from wastewater application will not exceed the allowable nitrogen load.

19. Fencing is required at treatment facilities, pump stations and storage/treatment ponds. Fencing of spray fields is not required.

20. The collection and channelization of irrigated wastewater for purposes other than retreatment is prohibited.

21. Direct application of treated wastewater to drainage ditches, any water bodies, and wetlands is prohibited.

22. Emergency Repairs

    Emergency repairs or the replacement of critical "like kind" components of the wastewater treatment facility necessary for the continued operation of the facility may be performed without first obtaining a construction permit from the Department.

    A report shall be submitted to the Department within five (5) days of completion of the emergency repairs or the replacement of critical "like kind" components of the wastewater treatment facility necessary for the continued operation of the facility. The report shall summarize the nature of the emergency and the repairs performed. All violations shall also be reported in accordance with Part IV.A.4 of this Permit and Section 6.5.9 of the Regulations.

23. Adverse Impact

    The Permittee shall take all reasonable steps to eliminate or minimize any adverse impact to waters of the State resulting from this Permit, including such accelerated or additional monitoring as necessary to determine the source, nature, and extent of the impact from a noncomplying discharge. In addition, at the direction of the Department, the Permittee shall submit a corrective action plan which will include a

description of the proposed actions to mitigate or eliminate the source of the impact and an associated completion schedule. The plan shall be enacted as approved by the Department.

24. Bypassing

The diversion of flow from any portion of the treatment facility's process flow (including, but not limited to, pretreatment, storage, distribution, and land application) necessary to maintain compliance with the terms and conditions of this Permit is prohibited unless:

a) The bypass is unavoidable to prevent personal injury, loss of life, severe property damage, or materially adversely affect public health and/or the environment; or

b) There are no alternatives readily available.

The Groundwater Discharges Section shall be orally notified within 24 hours after such bypass; and, a written submission and proposed corrective actions regarding the bypass shall be submitted within five days of the Permittee's becoming aware of the bypass. Where the need for a bypass is known (or should have been known) in advance, this notification shall be submitted to the Groundwater Discharges Section for approval at least ten days prior, or as soon as possible, before the date of bypass. Proposed corrective actions shall be implemented within 30 days of Department approval and the treatment facility shall be repaired and restored to the permitted design operations process flow.

25. Removed Substances

Solids, sludges, filter backwash or other pollutants removed in the collection, conveyance, or treatment of wastewater shall be disposed of in a manner such as to prevent any pollutant from entering the surface water or groundwater and to comply with applicable federal or state laws and regulations.

26. Power Failures

An alternative power source, which is enough to operate the wastewater treatment and disposal facilities, shall be available. If such alternative power source is not available, the Permittee shall 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 facilities.

PART IV

A. MANAGEMENT REQUIREMENTS AND RESPONSIBILITIES

1. Initiation of Facility Operations Notification

   If this Permit is for initial operations following construction, the Permittee shall notify the Department in writing within 24 hours of the initiation of operations.

2. Additional Information

   The Permittee shall furnish to the Department within a specified period of time, any information including copies of records, which may be requested by the Department to determine whether cause exists for modifying, revoking, reissuing, or terminating the permit, or to determine compliance with the Permit and the Regulations.

3. Operation Permit Re-Issuance

   At least 180 days before the expiration date of this permit, the Permittee shall apply for renewal or notify the Department of the intent to cease discharging by the expiration date. The application package for systems with a design flow ≥ 100,000 gpd, shall include a five (5) year Compliance Monitoring Report (CMR). The CMR shall be in accordance with Section 6.5.4.3 of Regulations. In the event that a timely and complete application has been submitted as determined by the Department, and the Department is unable, through no fault of the Permittee, to issue a new permit before the expiration date of this Permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable until a decision is made on the new application.

4. Change in Discharge

   All discharges authorized herein shall be consistent with the terms and conditions of this Permit. The discharge of any pollutant identified in this Permit more frequently than or at a level in excess of that authorized shall constitute a violation of the Permit.

   Any anticipated facility expansions, production increases, or process modifications that will result in new, different, or increased discharges of pollutants shall be reported in writing to the Department's Groundwater Discharges Section for approval. A new permit may be required.

   Any other activity which would constitute cause for modification or revocation and reissuance of this Permit as described in Part V.A.1 of this Permit shall be reported to the Groundwater Discharges Section. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

5. Non-compliance Notification

   The Permittee shall report to the Groundwater Discharges Section orally within 24 hours from the time the Permittee became aware of any noncompliance that may endanger the public health or the environment by contacting the Groundwater Discharges Section.

   If for any reason the Permittee does not comply with, or will be unable to comply with, any effluent limitations or other conditions specified in this Permit, the Permittee shall provide the Department with the following information in writing within five days of becoming aware of any actual or potential noncompliance:
   a. A description and cause of the non-compliance with any limitation or condition;
   b. The period of non-compliance including exact dates and times; or, if not yet corrected, the anticipated time the non-compliance is expected to continue; and

c. The steps being taken or planned to reduce, eliminate and/or prevent recurrence of the non-compliant condition.

6. Spill Reporting

In the event of any environmental release of pollutants (i.e., spill), the Permittee shall call the Department's 24-hour Emergency Release Reporting Hotline at (800) 662-8802.

The Permittee shall also notify the GWDS regarding any environmental release of pollutants (i.e., spill) into surface water or groundwater or on land, within 24-hours from the time the Permittee becomes aware of the release and activate their emergency site plan. In addition, the following information shall be reported to the GWDS within five days.

a. The facility name and location of release;

b. The chemical name or identity of any substance involved in the release;

c. An indication of whether the substance is an extremely hazardous substance;

d. An estimate of the quantity of any such substance that was released into the environment;

e. The time and duration of the release;

f. The medium or media into which the release occurred;

g. Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals;

h. Proper precautions to take as a result of the release, including evacuation;

i. The names and telephone number of the person or persons to be contacted for further information; and

j. Such other information as the GWDS may require.

7. Facility and Construction Changes

The Permittee shall submit a written report to the Department for review and approval, of any changes to the facility or construction of the system within the following time periods:

a. Thirty days before any planned activity, physical alteration to the permitted facility or addition to the permitted facility if that activity, alteration or addition would result in a change in information that was previously submitted to the Department;

b. Thirty days before any anticipated change which would result in noncompliance with any permit condition or the regulations; or

c. Immediately after the Permittee becomes aware of relevant facts omitted from, or incorrect information submitted in, a permit application or report to the Department.

8. Wastewater Treatment Facility Closure/Abandonment

In the event the wastewater treatment facility, or a component of the facility, is proposed to be abandoned, the permittee shall submit a proposed closure and abandonment work plan with procedures on how the facility will be abandoned for review and approval by the Department. The work plan shall address remediation if monitoring data indicates impacts to the environment. Upon review and approval of the work plan and completion of all closure and abandonment actions the permittee must contact the Department for a final inspection of the site.

9. Right of Entry

The permittee shall allow the Department entry and access, consistent with 7 Del.C. Ch. 60, to:

a. Enter the permitted facility.

b. Inspect any records that shall be kept under the conditions of the permit.

c. Inspect any facility, equipment, practice, or operation permitted or required by the permit.

d. Sample or monitor for the purpose of assuring permit compliance of any substance or any parameter at the facility.

10. Permit Transferability

Permits may be transferred to a new owner or operator. The Permittee shall notify the Department by requesting a change of ownership of the permit before the date of transfer. The transfer shall be consistent with any notarized legal documents and/or CPCN required by the Regulations. The legal documentation shall be provided with the application. The application shall be received 30 days before the transfer.

a. No person shall transfer a permit from one (1) person to another unless 30 days written notice is given to the Department, indicating the transfer is agreeable to both persons, and approval of such transfer is obtained in writing from the Department, and any conditions of the approval of such transfer is obtained in writing from the Department, and any conditions of the transfer approved by the Department are complied with by the transferor and the transferee.

b. The notice to the Department shall contain a written agreement between the transferor and the transferee, indicating the specific date of proposed transfer of permit coverage and acknowledging responsibilities of current and new permittees for compliance with and liability for the terms and conditions of this Permit. The notice shall be signed by both the transferor and the transferee.

PART V

A. PROVISIONS

1. Permit Revocation

   The Department may revoke a permit if, among other things, the Permittee violates any permit condition, these regulations, fails to pay applicable Departmental fees, obtains the permit by misrepresentation or fails to fully disclose all relevant facts.

   Except in cases of emergency, the Department shall issue a written notice of intent to revoke to the Permittee prior to final revocation. Revocation shall become final within 20 days of receipt of the notice by the Permittee, unless within that time the permittee requests an administrative hearing in writing.

   The Department shall notify the Permittee in writing of any revocation hearing at least 20 days prior to the date set for such hearing.

   If the Department finds the public health, safety or welfare requires emergency action, the Department shall incorporate findings in support of such action in a written notice of emergency revocation issued to the permittee. Emergency revocation shall be effective upon receipt by the Permittee. Thereafter, if requested by the permittee in writing, the Department shall provide the permittee a revocation hearing.

2. Permit Modifications/Amendments

   In consultation with the Permittee, the Department may modify or amend an existing permit provided that the modifications would not result in an increased impact or risk to the environment or to public health.

3. State Laws

   This Permit shall not be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation.

4. Property Rights

   The issuance of this Permit does not convey any property rights of either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

5. Severability

   The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit, to any circumstances is held invalid; the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

6. This Permit does not relieve the Permittee of complying with any applicable Federal, State or local regulations.

7. If the *Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems* or applicable state/federal regulations are revised, this Permit may be opened and modified accordingly.

8. This Permit supersedes all previous spray irrigation operation Permits issued to the Permittee for this facility.