## NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION DEPARTMENT OF ENVIRONMENTAL QUALITY

# CATTLE WASTE MANAGEMENT SYSTEM NPDES GENERAL PERMIT

This National Pollutant Discharge Elimination System (NPDES) General Permit (Permit) is issued pursuant to North Carolina General Statutes G.S. 143-215 et seq. and Section 402 of the Clean Water Act (Act), may apply to any cattle facility in the State of North Carolina and shall be effective from July 1, 2017 until June 30, 2022. The Division of Water Resources of the Department of Environmental Quality (Division) will make the facility's Certificate of Coverage (COC) and Certified Animal Waste Management Plan (CAWMP) available for public review for thirty (30) days prior to issuance of coverage under this Permit.

The animal waste management systems covered by this Permit normally include some type of collection system (flush, pit recharge, scraped lots, etc.); pipes or ditches for transmission of the waste; lagoons or ponds to collect, treat, and store the waste; land application equipment; and sufficient acreage for application of the animal waste at agronomic rates. If prior approval is received from the Director, this Permit may cover innovative treatment systems incorporated into the animal waste management system.

All activities authorized herein shall be consistent with the terms and conditions of this Permit.

Holders of a COC under this Permit shall comply with the following specified conditions and limitations.

# I. <u>PERFORMANCE STANDARDS</u>

1. Any discharge of waste that reaches surface waters or wetlands is prohibited except as otherwise provided in this Permit and associated statutory and regulatory provisions. Waste shall not reach surface waters or wetlands by runoff, drift, manmade conveyance, direct application, direct discharge, or ditches not otherwise classified as state waters.

The waste management system operated under this Permit shall be effectively maintained and operated as a non-discharge system to prevent the discharge of pollutants to surface waters or wetlands. Application of waste to terraces and grassed waterways is acceptable as long as it is applied in accordance with Natural Resources Conservation Service (NRCS) standards and does not result in a discharge of waste to the surface waters or wetlands.

Facilities existing on or prior to April 14, 2003 must be designed, constructed, and operated to contain all waste plus the accumulated volume from a 25-year, 24-hour rainfall event for the location of the facility. A facility that has a discharge of waste that results because of a storm event more severe than the 25-year, 24-hour storm will not be considered to be in violation of this Permit if the facility is in compliance with its CAWMP, the Act and its implementing regulations, and this Permit.

Any discharge or application of waste to a ditch that drains to surface waters or wetlands is prohibited except as follows: (a) discharges from the ditches are controlled by best management practices (BMPs) designed in accordance with NRCS standards; (b) the BMPs have been submitted to and approved by the Division; (c) the BMPs were implemented as designed to prevent a discharge to surface waters or wetlands; (d) the waste was removed immediately from the ditch upon discovery; and (e) the event was documented and reported in accordance with Condition VI.21. of this Permit. Nothing in this exception shall excuse a discharge to surface waters or wetlands except as may result because of rainfall from a storm event more severe than the 25-year, 24-hour storm. [40 CFR 412 Subpart C and D; 15A NCAC 02T .1305 (e)]

- 2. No discharge of waste shall result in a violation of the water quality standards established for the receiving waters as per Title 15A, Subchapter 2B, Section .0200 of the North Carolina Administrative Code (NCAC).
- 3. The facility's COC and its CAWMP are hereby incorporated by reference into this Permit. The CAWMP must be consistent with all applicable laws, rules, ordinances, and standards (federal, state and local) in effect at the time of siting and design and certification of the facility.

The Permittee must assess, on an ongoing basis, the effectiveness of the implementation of the CAWMP. The Permittee must modify the CAWMP in order to address any changes needed to maintain compliance with the facility's COC and this Permit. Any proposed change to the CAWMP requires a formal request to modify the COC be submitted to the Division's Central Office. The request shall include the proposed version of the CAWMP with changes from the previous version identified. The Division will review the request to determine if the changes are considered a *major modification* or a *minor modification* (see Section VIII. Definitions).

Proposed major modifications will be made available for public review and comment for thirty (30) days. The Division will issue a new or amended COC after consideration of public comments and approval of the modification. Note that a supplemental sludge removal and application plan is considered a major modification of the CAWMP and is subject to the thirty (30) day public notice requirement prior to approval. A facility may not implement a major modification until a new or amended COC has been issued.

Minor modifications do not require public notice; however, the Permittee must receive approval from the Division prior to implementation.

The Permittee may request permission from the Division to immediately proceed with a temporary major modification to the CAWMP for a maximum of one hundred eighty (180) days. The Division will make these modifications available for public review for thirty (30) days. The public review must occur prior to the close of the temporary modification period. [40 CFR 122.42(e); 15A NCAC 02T .1305 (e)]

Any violation of the COC or the CAWMP shall be considered a violation of this Permit and subject to enforcement actions. A violation of this Permit may result in the Permittee having to take immediate or long-term corrective action(s) as required by the Division or the Environmental Protection Agency (EPA). These actions may include, but are not limited to, modifying the CAWMP; ceasing land application of waste; removing animals from the facility; or reopening and modifying, revoking and reissuing, and/or terminating the COC. [40 CFR 122.41(a); 15A NCAC 02T .1305 (e)]

- 4. Any proposed increase in the certified design capacity or the Steady State Live Weight (SSLW) of animals above that authorized by the COC will require a modification to the CAWMP and the COC prior to the actual increase in either waste production or (SSLW) of animals. [15A NCAC 02T .1305 (b)]
- 5. A copy of this Permit, the facility's COC, certification forms, lessee and landowner agreements, and the CAWMP shall be readily available at the facility (stored at places such as the farm residence, office, outbuildings, etc.) where animal waste management activities are being conducted for the life of this Permit, unless otherwise specified in this Permit (see Condition IV.20). These documents shall be kept in good condition, and records shall be maintained in an orderly fashion. [40 CFR 122.42(e); 15A NCAC 02T .1305 (e)]
- 6. If prior approval is received from the Director, facilities that have been issued a COC to operate under this Permit may either add treatment units for the purpose of removing pollutants before land application of waste or add various innovative treatment processes to the systems in order to determine if the innovative treatment process will improve how the waste is treated and/or managed. Prior to any approval, the Permittee must demonstrate to the satisfaction of the Director that the new treatment unit/innovative treatment process will not interfere with the operation of the existing treatment system and that a process is in place to properly manage and track the pollutants removed. [15A NCAC 2T .1308]
- 7. For all new and expanding operations, no collection, treatment, or storage facilities may be constructed in a 100-year flood plain. [G.S. 106-803 (a)]
- 8. A COC under this Permit will not be issued to any facility until the applicant demonstrates that the facility can comply with the requirements of state and federal phosphorus-loss standards. [40 CFR 122.42(e); 15A NCAC 02T .1305 (e)]

## II. <u>PUBLIC NOTIFICATION</u>

- 1. When the Division determines that an application for permit coverage and CAWMP are complete, the Division will publish the proposal to grant coverage under this Permit, the application for coverage, and the CAWMP for public review and comment for a period of thirty (30) days. [40 CFR 124.10; 15A NCAC 02T .1305 (e)]
- Documents for public review will be made available on the Division's website and at the Division's Central Office located at 512 N. Salisbury St, Raleigh, NC 27604. [40 CFR 124.10; 15A NCAC 02T .1305 (e)]
- 3. The following items require notification for public review and comment [40 CFR 124.10; 15A NCAC 02T .1305 (e)]:
  - a. Application for permit coverage, including permit renewal applications.
  - b. Requests for major modifications to a Permit, see Condition I.3.
  - c. Supplemental sludge removal and application plans, see Condition III.9.
  - d. Modifications to the animal waste collection, treatment, and storage system.

# III. OPERATION AND MAINTENANCE REQUIREMENTS

- 1. The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this Permit. [40 CFR 122.41 (d); 15A NCAC 02T .1305 (e)]
- 2. The Permittee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit. [40 CFR 122.41(e); 15A NCAC 02T .1305 (e)]
- 3. The maximum waste level in lagoons/storage ponds shall not exceed that specified in the facility's CAWMP. At a minimum, the maximum waste level for lagoons/storage ponds must not exceed the level that provides adequate storage to contain a 25-year, 24-hour storm event plus the designed structural freeboard [a minimum of one (1) foot is required] except that there shall be no violation of this condition if:
  - a. there is a storm event more severe than a 25-year, 24-hour event,
  - b. the Permittee is in compliance with its CAWMP, and
  - c. the waste level has not entered the designed structural freeboard.

In addition to these requirements, new and expanding farms with lagoon/storage pond designs completed after September 1, 1996 must also provide storage for the heavy rainfall factor. In the case of gravity-fed lagoons/storage ponds in series, a 25-year, 24-hour storm event and/or the heavy rainfall factor storage requirement for the system may be designed into the lowest lagoon/storage pond in the system. However, adequate freeboard must be designed into the upper lagoons/storage ponds to allow sufficient storage to prevent the waste level from rising into the structural freeboard while the storm water is draining into the lowest lagoon in the system. [15A NCAC 02T .1305 (b)]

- 4. A vegetative cover shall be maintained as specified in the facility's CAWMP on all land application fields and buffers in accordance with the CAWMP. No waste shall be applied upon areas not included in the CAWMP or upon areas where the crop is insufficient for nutrient utilization. However, if the CAWMP allows, then waste may be applied up to thirty (30) days prior to planting or breaking dormancy. [15A NCAC 02T .1305 (b)]
- 5. Soil pH on all land application fields must be adjusted according to the recommendation from the Standard Soil Fertility Analysis (see Condition IV.7) to ensure that it is maintained in the optimum range for crop production. [15A NCAC 02T .1305 (b)]
- 6. Land application rates shall be in accordance with the CAWMP. In no case shall land application rates for any field exceed agronomic rates or the established crop removal rate for phosphorus for fields with a "HIGH" phosphorus-loss assessment rating as established using the Phosphorus Loss Assessment Tool (PLAT) developed by NC State University and NRCS. There shall be no waste application on fields with a "VERY HIGH" phosphorus-loss assessment rating.

In no case shall land application rates result in excessive ponding or any runoff during any given application event. [15A NCAC 02T .1305 (b)]

- 7. Direct application of animal waste onto land which is used to grow crops for direct human consumption that do not undergo further processing (e.g., strawberries, melons, lettuce, cabbage, apples, etc.) shall not occur following the planting of the crop or at any time during the growing season or, in the case of fruit bearing trees, following breaking dormancy. Application of animal wastes shall not occur within thirty (30) days of the harvesting of fiber and food crops for direct human consumption that undergoes further processing. [15A NCAC 02T .1109(b)]
- 8. If manure or sludge is applied on conventionally tilled, bare soil, the waste shall be incorporated into the soil within two (2) days after application on the land, or prior to the next rainfall event, whichever occurs first. This requirement does not apply to no-till fields, pastures, or fields where crops are actively growing. [15A NCAC 02T .1305 (b)]
- 9. The Permittee shall submit a sludge removal and application plan to the Division at least ninety (90) days prior to sludge removal, as these are considered a major modification of the CAWMP (see Condition I.3). A phosphorus-loss evaluation must be completed for any field that is to receive sludge that has not already been evaluated in accordance with Condition IV.8, and the sludge land application must be in accordance with the results of this evaluation. This condition does not apply to situations where waste is transferred to, and land applied by a third party, as described in Condition IV.10. [G. S. 143-215.10C (e); 15A NCAC 02T .1305 (b)]

The Permittee shall notify the appropriate Division Regional Office at least twenty-four (24) hours prior to the start of sludge removal and land application. At the time of sludge removal from a lagoon/storage pond, the sludge must be managed in accordance with the CAWMP. When removal of sludge becomes necessary, provisions must be taken to prevent damage to the lagoon/storage pond dikes and liner. [15A NCAC 02T .1305 (b)]

- 10. No material other than animal wastes of the type generated on this facility shall be disposed of in the animal waste collection, treatment, storage, or application systems. This includes but is not limited to pesticides, toxic chemicals and petroleum products. The Permittee shall comply with effluent standards and prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the Permit has not yet been modified to incorporate the requirement. [40 CFR 122.42 (e); 15A NCAC 02T .1305 (b)]
- 11. Domestic and/or industrial wastewater from showers, toilets, sinks, etc. shall not be discharged into the animal waste management system. Water from washing machines located in the milking parlors, used exclusively for washing cloths used during milking, and from wash vats required to be connected to the animal waste management system by Grade A Pasteurized Milk Ordinance Part II, Section 7, Item 5r are exempt from this requirement. Wash water from the cleaning of stock trailers will be permissible only for trailers that are owned by the facility and are used to transport animals to and from the facility, as long as the system has been evaluated and approved to accommodate the additional volume. Only those cleaning agents and soaps that are EPA approved, will not harm the cover crop, and will not contravene the groundwater standards listed in 15A NCAC 2L may be utilized in facilities covered by this Permit. Instruction labels are to be followed when using cleaning agents and soaps. [15A NCAC 02T .1305 (b)]
- 12. Disposal of dead animals resulting from normal mortality rates associated with the facility shall be done in accordance with the facility's CAWMP and the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) Veterinary Division's statutes and regulations. As a part of the facility's CAWMP, the Permittee shall develop a mortality management plan that addresses normal mortality rates and mass mortality scenarios.

Disposal of dead animals whose numbers exceed normal mortality rates associated with the facility shall be done in accordance with the facility's CAWMP and the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) Veterinary Division's statutes and regulations plus: 1) burial of such animals shall be done in consultation with the State Veterinarian of the NCDA&CS Veterinary Division's statutes and in compliance with NCDA&CS regulations; 2) all such burial sites must be mapped, and the dates and numbers of the animals buried by type must be recorded; and 3) the map and recorded information are submitted to the appropriate Division Regional Office within fifteen (15) calendar days of burial.

In the event of a Governor-declared state of emergency, disposal of dead animals shall be done in accordance with requirements and guidelines dictated by the State Veterinarian according G.S. 106-402.1. The Division may require groundwater monitoring when there is massive burial of animals. All burial sites of such animals must be mapped, and the dates and numbers of the animals buried by type must be recorded. [40 CFR 122.42(e); 15A NCAC 02T .1305 (e)]

- 13. Unless accounted for in temporary storage volume, all uncontaminated runoff from the surrounding property and buildings shall be diverted away from the waste lagoons/storage ponds to prevent any unnecessary addition to the liquid volume in the structures. Runoff from lounging areas to the lagoons/waste storage ponds shall be prevented, unless it has been approved in the CAWMP. [15A NCAC 02T .1305 (b)]
- 14. Animals confined at the Facility shall not be allowed to come into direct contact with waters of the State. Fences may be used to restrict such access. [40 CFR 122.42(e); 15A NCAC 02T .1305 (e)]
- Site-specific conservation practices necessary to prevent runoff of pollutants to waters of the State (such as no-till cropping to meet PLAT requirements) shall be identified in the CAWMP. These practices shall be implemented and maintained as part of the Permit. [40 CFR 122.42(e);
  15A NCAC 02T .1305 (e)]
- 16. A protective vegetative cover shall be established and maintained on all earthen lagoon/storage pond embankments (outside toe of embankment to maximum pumping elevation), berms, pipe runs, and diversions to surface waters or wetlands. Trees, shrubs, and other woody vegetation shall not be allowed to grow on the lagoon/storage pond embankments. All trees shall be removed in accordance with good engineering practices. Lagoon/storage pond areas shall be accessible, and vegetation shall be mowed regularly. [15A NCAC 02T .1305 (b)]
- 17. Lagoons/storage ponds shall be kept free of foreign debris including, but not limited to, tires, bottles, light bulbs, gloves, syringes, or any other solid waste. [15A NCAC 02T .0108 (b)(1)]
- 18. The facility must have at least one of the following items at all times: (a) adequate animal waste application and handling equipment, (b) a lease, or other written agreement, for the use of the necessary equipment, or (c) a contract with a third-party applicator capable of providing adequate waste application. [15A NCAC 02T .1305 (b)]
- 19. The Permittee shall designate a certified Type B Animal Waste Management System Operator with a valid certification to be the Operator in Charge (OIC) for the animal waste management system. The animal waste management system shall be operated by the OIC or a designated back-up OIC under the OIC's supervision. [G.S. 90A-47]

- 20. In accordance with 15A NCAC 08F .0203(c)(2), the OIC or a designated back-up OIC shall inspect, or a person under the supervision of an OIC or designated back-up OIC shall inspect, the land application site as often as necessary to ensure that the animal waste is applied to land in accordance with the CAWMP. In no case shall the time between inspections be more than one hundred twenty (120) minutes during the application of waste. A record of each inspection shall be recorded on forms supplied by, or approved by, the Division and shall include the date, time, sprayfield number, and name of the operator for each inspection. Inspections shall include but not be limited to visual observation of application equipment, spray fields, subsurface drain outlets, ditches, and drainage ways for any discharge of waste.
- 21. The Permittee shall install, operate, and maintain devices on all irrigation pumps/equipment designed to automatically stop irrigation activities during precipitation. This Condition does not apply to manure spreaders or other equipment pulled by manned vehicles. [40 CFR 122.41 (e); 15A NCAC 02T .1305 (e)]

The Permittee will not be required to install, operate, and maintain the devices if the Permittee commits to provide for the presence of the OIC or the designated backup OIC at all times during the land application of waste, in order that, in the case of a precipitation event, the irrigation activities will be stopped immediately. This commitment must be submitted in writing to the Division on a form supplied by, or approved by, the Division. [G.S. 90A-47]

- 22. Bypass of a treatment unit within the animal waste management system is prohibited. [40 CFR 122.41 (m); 15A NCAC 02T .1305 (e)]
- 23. No waste shall be applied in wind conditions that reasonably might be expected to cause the mist to reach surface waters or wetlands. [15A NCAC 02T .0108 (b)(1)]
- 24. The Permittee shall maintain buffer strips or other equivalent practices as specified in the facility's CAWMP near feedlots, manure storage areas, and land application areas. [40 CFR 122.42 (e); 15A NCAC 02T .1305 (e)]
- 25. Waste shall be applied using the following setbacks from surface water or wetlands or any conduit to surface water or wetlands: (a) a 100-foot setback with no vegetated buffer or (b) a 35-foot setback with a vegetated buffer or (c) an alternative practice that has been submitted to and approved by the Division that would provide equivalent pollutant reductions to the 100-foot setback. [40 CFR 412.4 (c); 15A NCAC 02T .1305 (e)]
- 26. Waste shall not be applied on land that is flooded, saturated with water, frozen, or snow covered at the time of land application. [15A NCAC 02T .1305 (b)]
- 27. Land application of waste is prohibited during precipitation events. The Permittee shall consider pending weather conditions in making the decision to land apply waste. Weather conditions at the time of land application and for twenty-four (24) hours prior to and following application must be documented on forms supplied by, or approved by, the Division. [15A NCAC 02T .0108 (b)(1)]

Land application of waste shall cease within four (4) hours of the time that the National Weather Service issues a Hurricane Warning, Tropical Storm Warning, a Flood Watch, or a Flash Flood Watch associated with a tropical system including a hurricane, tropical storm, or tropical depression for the county or specific area in which the permitted facility is located. Watches and warnings are posted on the National Weather Service's website located at: <u>www.weather.gov</u>. More detailed website information can be found on Page 2 of the COC. Watch and warning information can also be obtained by calling the local National Weather Service Office that serves the respective county, which can be found on Page 2 of the COC. [15A NCAC 02T .0108 (b)(1)]

- 28. Land application activities shall cease on any application site that exceeds a Mehlich 3 Soil Test Index for copper of greater than 3,000 (108 pounds per acre) or zinc of greater than 3,000 (213 pounds per acre). [15A NCAC 02T .1305 (b)]
- 29. Crops to which animal waste is applied must be removed from the land application site and properly managed and utilized. Harvested crops shall not be allowed to become unusable due to prolonged exposure to the weather. [15A NCAC 02T .0108 (b)(1)]
- 30. Any major structural repairs to lagoons/storage ponds must have written documentation from a Professional Engineer or designated technical specialist certifying proper design and installation. However, if a piece of equipment is being replaced with a piece of equipment of the identical specifications, no technical specialist approval is necessary [i.e. piping, reels, valves, pumps (if the gallons per minute (gpm) capacity is not being increased or decreased), etc.] unless the replacement involves disturbing the lagoon/storage pond embankment. [15A NCAC 02T .0108 (b)(1)]
- 31. In accordance with NRCS NC Conservation Practice Standard No. 359 "Waste Treatment Lagoon", an operator may temporarily lower lagoon levels to provide irrigation water during drought periods and to provide additional temporary storage for excessive rainfall during the hurricane season and in preparation for the following winter months during the period of June 15-October 31. All conditions of NRCS NC Standard No. 359 must be satisfied prior to lowering lagoon levels below designed stop pump levels.

## IV. MONITORING AND REPORTING REQUIREMENTS

- 1. An inspection of the waste collection, treatment, and storage structures, and runoff control measures shall be conducted and documented at a frequency to insure proper operation but at least monthly and after all storm events of greater than one (1) inch in twenty-four (24) hours. For example, lagoons/storage ponds, and other structures should be inspected for evidence of erosion, leakage, damage by animals, or discharge. Inspections shall also include visual observation of subsurface drain outlets, ditches, and drainage ways for any discharge of waste. [15A NCAC 02T .0108 (b)(1)]
- 2. Monitoring and Recording Freeboard Levels
  - a. Highly visible waste-level gauges shall be maintained to mark the level of waste in each lagoon/storage pond that does not gravity feed through a free flowing transfer pipe into a subsequent structure. The gauge shall have readily visible permanent markings. A sketch of each waste-level gauge shall be included in the facility's records. The sketch shall include, at a minimum, markings for the top of temporary storage and top of permanent storage with labels indicating the corresponding depths in inches. [40 CFR 412.37; 15A NCAC 02T .1305 (e)]

The waste level in each lagoon/storage pond with a waste level gauge shall be monitored and recorded weekly on forms supplied by, or approved by, the Division. [40 CFR 412.37; 15A NCAC 02T .1305 (e)]

The Director may require more frequent monitoring and recording on waste levels based on the facility's compliance history for freeboard violations. [15A NCAC 02T .0108 (c)]

- b. As deemed necessary by the Director, new, modified, or automated waste-level gauges may be required at any facility if it is determined that the existing gauges are not accurate in indicating actual freeboard levels or based on violations and/or incomplete or incorrect record keeping of waste levels. [15A NCAC 02T .0108 (c)]
- 3. Monitoring and Recording Precipitation Events
  - a. Facilities issued a COC to operate under this Permit are responsible for installing a rain gauge to measure precipitation. The precipitation type and amount must be recorded following all precipitation events. The rain gauge must be located in the same proximity as the lagoons/storage ponds. [15A NCAC 02T .0108 (b)(1)]
  - b. As deemed necessary by the Director, an automated rain gauge and recorder may be required to measure and record all precipitation events based on the facility's violations and/or incomplete or incorrect record keeping of precipitation events. [15A NCAC 02T .0108 (b)(1)]
- 4. Monitoring and Recording Land Application Events
  - a. The Permittee shall record all land application events, including hydraulic loading rates, nutrient loading rates (nitrogen and phosphorus), cropping information, and weather conditions. The OIC will also provide a record of the continuous or 120-minute inspections of the application area during each land application event. [40 CFR 412.37; 15A NCAC 02T .1305 (e)]
  - b. The Director may require the Permittee to install and operate flow meters with flow totalizers based on the facility's violations and/or incomplete or incorrect record keeping during land application events. [15A NCAC 02T .0108 (b)(1)]
- 5. An inspection of all water lines, including drinking water and cooling water lines, shall be conducted and documented daily. [40 CFR 412.37; 15A NCAC 02T .1305 (e)]
- 6. All corrective actions taken as a result of inspection activity shall be documented. [40 CFR 412.37; 15A NCAC 02T .1305 (e)]
- 7. A Standard Soil Fertility Analysis, including pH, phosphorus, copper, and zinc, shall be conducted on each application field receiving animal waste in accordance with G.S. 143-215.10C(e)(6). The analysis must be conducted at least once every three years.
- 8. The Permittee shall perform a phosphorus-loss evaluation prior to application for renewal of this Permit in accordance with state and federal requirements. This evaluation must be documented on forms supplied by or approved by the Division and must be submitted to the Division. Upon completion of the phosphorous-loss evaluation, the CAWMP shall be updated to include the current risk assessment rating, and submitted to the Division upon application for renewal of this Permit. [G.S. 143-215.10C (e)]

9. An analysis of the animal waste shall be conducted in accordance with recommended laboratory sampling procedures as close to the time of application as practical and at least within sixty (60) days (before or after) of the date of application. Every reasonable effort shall be made to have the waste analyzed prior to the date of application and as close to the time of waste application as possible. This analysis shall include the following parameters [G.S.143-215.10C(e)]:

Nitrogen	Zinc
Phosphorus	Copper

- 10. The Permittee shall maintain records of the removal of any manure, litter, or process wastewater from the Facility, provide the recipient(s) with the most current nutrient analysis, and record the date, recipient name and address, and approximate amount of manure or process wastewater transferred. The Permittee must inform the recipient(s) of the responsibility of properly managing the land application of the solids. [40 CFR 122.42(e); 15A NCAC 02T .1305 (e)]
- 11. All facilities utilizing lagoons, which are issued a COC to operate under this Permit, shall conduct an annual survey of the sludge accumulation in all lagoons. The survey report should be written on forms provided or approved by the Division and shall include a sketch showing the depth of the sludge in the various locations within each lagoon. This survey shall be submitted as part of the facility's annual report in the year it was conducted; see Condition IV.19. Survey frequency may be reduced if it can be demonstrated to the satisfaction of the Division that the rate of sludge accumulation does not warrant an annual survey.

If the sludge accumulation is such that the structure does not satisfy the criteria set by NRCS NC Conservation Practice Standard No. 359, two copies of a Plan of Action (POA) must be submitted to the Division Central Office within ninety (90) days of the determination. The plan shall describe removal and/or waste utilization procedures to be used. [15A NCAC 02T .1305 (b)]

- 12. All waste application equipment must be tested and calibrated at least once per year. The results must be documented on forms provided by, or approved by, the Division. [15A NCAC 02T .1305(b)]
- 13. The Permittee must maintain stocking records for the facility so as to demonstrate and report the annual average number of animals. [40 CFR 122.42 (e); 15A NCAC 02T .1305 (e)]
- 14. The Permittee must maintain mortality management records, including dates, numbers, disposal methods, and burial locations (if applicable). [40 CFR 412.37; 15A NCAC 02T .1305 (e)]
- 15. A record shall be created and maintained of all transfers of waste between lagoons/storage ponds not typically operated in series. At a minimum, such record shall include the identity of the lagoon/storage pond from which the waste was transferred, the identity of the lagoon/storage pond receiving the waste, the date and time of transfer, and the total volume of waste transferred. [15A NCAC 02T .0108 (b)(1)]
- 16. If, for any reason, there is a discharge from the animal waste management system (including discharges from the land application sites) to surface waters or wetlands, the Permittee is required to make notification in accordance with Condition IV.21, unless otherwise noted. The Permittee will be responsible for notifying the Division with the following information [40 CFR 122.41 (l); 15A NCAC 02T .1305 (e)]:
  - a. Description of the discharge: A description of the discharge including an estimate of the volume discharged, a description of the flow path to the receiving surface waters or wetlands and a site sketch showing the path of the waste.

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- b. Time of the discharge: The length of time of the discharge, including the exact dates and times that it started and stopped, and if not stopped, the anticipated time the discharge is expected to continue.
- c. Cause of the discharge: A detailed statement of the cause of the discharge. If caused by a precipitation event, detailed information from the on-site rain gauge concerning the inches and duration of the precipitation event.
- d. All steps being taken to reduce, stop and cleanup the discharge. All steps to be taken to prevent future discharges from the same cause.
- e. Analysis of the waste: A copy of the last waste analysis conducted as required by Condition IV. 9 above.
- f. A waste sample, obtained within seventy-two (72) hours following first knowledge of the discharge to surface waters or wetlands, from the source lagoon/storage pond, shall be analyzed for the following minimum parameters:

Fecal coliform bacteriaFive-day biochemical oxygen demand (BOD5)Total suspended solidsTotal phosphorusAmmonia nitrogenTotal Kjeldahl nitrogen (TKN) or total nitrogenNitrate nitrogenTotal Kjeldahl nitrogen (TKN) or total nitrogen

Monitoring results must be submitted to the Division within thirty (30) days of the discharge event.

- 17. All monitoring must be conducted according to test procedures approved in accordance with 40 CFR Part 136, unless other test procedures have been specified in this Permit or approved by the Director.
- 18. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. [40 CFR 122.41 (j); 15A NCAC 02T .1305 (e)]
- 19. An annual certification report shall be filed with the Division's Central Office by March 1 of each year for the previous calendar year's activities. If the facility was not in compliance, the annual report must be used to summarize all noncompliance during the previous year, actions taken or actions proposed to be taken to resolve noncompliance, and current compliance status of the facility. In addition, the annual report must certify that all records required by this Permit are available for review during the annual inspection performed by the Division. The annual report must be completed on a form provided by or approved by the Division. This annual report requirement will continue for the duration of this permit cycle. [40 CFR 122.42(e); 15A NCAC 02T .1305 (e)]

The EPA Electronic Reporting Rule (Docket ID No. EPA-HQ-OECA-2009-0274) requires all regulated entities to electronically report data required by the NPDES permit program instead of filing written paper reports. No later than December 21, 2020, the Permittee must begin electronic submission of all annual report elements listed below directly to EPA. (Annual report date will continue to have March 1 submission deadline.)

- a. The number and type of animals (annual average);
- b. Estimated amount of total manure, litter, and/or wastewater generated in the previous calendar year (tons/gallons);
- c. Estimated amount of total manure, litter, and/or wastewater transferred to other person in previous calendar year (tons/gallons);
- d. Total number of acres for land application covered by the CAWMP:
- e. Total number of acres under control of the Permittee that were used for land application of manure, litter, and wastewater in the previous calendar year;
- f. Summary of all manure, litter, and wastewater discharges from the production area that occurred in the previous calendar year, including date, time, and approximate volume:
- g. A statement indication whether the current version of the CAWMP was developed or approved by a certified technical specialist with proper designation;
- h. The actual crop(s) planted and actual yield(s) for each field, the actual nitrogen and phosphorus content of the manure, litter, and wastewater, the results of calculations conducted to determine maximum application rates, the results of any soil tests for nitrogen and phosphorus taken during the previous calendar year, the data used in calculations to determine maximum application rates, and the amount of any supplemental fertilizer applied in the previous calendar year.

The Permittee may seek a temporary electronic reporting waiver by submitting a request to the Division. The waiver request must contain the following details:

- a. Facility name;
- b. Permit number;
- c. Facility mailing address and physical address;
- d. Name, address, and contact information for the owner, operator, or authorized representative;
- e. Brief written statement regarding the basis for claiming such a temporary waiver.

The Division will either approve or deny this electronic reporting waiver request within 120 days. The duration of a temporary waiver may not exceed five (5) years. The permittee must reapply for a new temporary waiver. Approved waivers are not transferrable. Only permittees with an approved reporting waiver request may submit monitoring data and reports on paper to the Division for the period that the approved waiver request is effective. Permittees with approved waiver requests must submit all annual report elements listed above to the Division's Central Office by March 1 of each year for the previous calendar year's activities. The Permittee must sign and certify all submissions, and all submissions must be legible originals.

- 20. All records required by this permit and the facility's CAWMP, including but not limited to soil and waste analysis, rain gauge readings, freeboard levels, irrigation and land application event(s), past inspection reports and operational reviews, animal stocking records, records of additional nutrient sources applied (including but not limited to sludges, unused feedstuff leachate, milk waste, septage and commercial fertilizer), cropping information, waste application equipment testing and calibration, and records of transfer of separated solids to off-site location(s), shall be maintained by the Permittee in chronological and legible form for a minimum of five (5) years. These records shall be maintained on forms provided by, or approved by, the Division and shall be readily available at the facility (stored at places such as the farm residence, office, outbuildings, etc.) for inspection. These documents shall be kept in good condition, and records shall be maintained in an orderly fashion. The Permittee shall also furnish complete copies of any records required by this Permit upon request from the Division or the EPA. [40 CFR 122.42(e); 15A NCAC 02T .1305 (e)]
- 21. Notification:

The Permittee shall give advance notice to the Division of any planned changes in the permitted facility or activity, which may result in noncompliance with Permit requirements.

When the Permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in an application for coverage under this Permit or in any report to the Division, it shall promptly submit such facts or information to the Division.

The Permittee shall report by telephone to the appropriate Division Regional Office as soon as possible, but in no case more than twenty-four (24) hours following first knowledge of the occurrence of any of the following events [40 CFR 122.41 (1); 15A NCAC 02T .1305 (e)]:

- a. Failure of any component of the animal waste management system resulting in a discharge to surface waters or wetlands.
- b. Any failure of the waste treatment and disposal system that renders the facility incapable of adequately receiving, treating, or storing the waste and/or sludge.
- c. A spill or discharge from a vehicle transporting waste or sludge to the land application field which results in a discharge to surface waters or wetlands or an event that poses a serious threat to surface waters or wetlands.
- d. Any deterioration or leak in a lagoon/storage pond that poses an immediate threat to the environment or human safety or health.
- e. Failure to maintain storage capacity in a lagoon/storage pond greater than or equal to that required in Condition III.3. of this Permit.

- f. Failure to maintain waste level in a lagoon/storage pond below that of the designed structural freeboard. Note that this notification is in addition to the report required by Condition IV.21.e above.
- g. An application of waste either in excess of the limits set out in the CAWMP or where runoff enters surface waters or wetlands.
- h. Any discharge to surface waters or wetlands and/or that poses a serious threat to the environment.

For any emergency that requires immediate reporting after normal business hours, contact must be made with the Division of Emergency Management at **1-800-858-0368**.

The Permittee shall also file a written report to the appropriate Division Regional Office within five (5) calendar days following first knowledge of the occurrence. This report shall outline the actions taken or proposed to be taken to correct the problem and to ensure that the problem does not recur. The requirement to file a written report may not be waived by the Division Regional Office.

In the event the waste level in a lagoon/storage pond is found to be within the designed structural freeboard, the Permittee shall file a written report to the appropriate Division Regional Office within two (2) calendar days following the first knowledge of the occurrence. This report shall outline actions taken or proposed to be taken to reduce waste levels below the designed structural freeboard within five (5) calendar days of first knowledge of the occurrence. [40 CFR 122.41(l) 15A NCAC 02T .1305 (e)]

- 22. The Director may require facilities to submit additional reports and/or certifications based on the facility's compliance history. [15A NCAC 02T .0108 (c)]
- 23. In the event of a discharge of one thousand (1,000) gallons or more of animal waste to surface waters or wetlands, the Permittee must issue a press release to all print and electronic news media that provide general coverage in the county in which the discharge occurred setting out the details of the discharge. The press release must be issued within forty-eight (48) hours after it is determined that the discharge has reached the surface waters or wetlands. The Permittee shall retain a copy of the press release and a list of the news media to which it was distributed for at least one year after the discharge and shall provide a copy of the press release and the list of the news media to which it was distributed to any person upon request. [G.S. 143-215.10C(h)]
- 24. In the event of a discharge of fifteen thousand (15,000) gallons or more of animal waste to surface waters or wetlands, a public notice is required in addition to the press release described in Condition IV.23. The public notice of the discharge must be placed in a newspaper having general circulation in the county in which the discharge occurred and in each county downstream from the point of discharge that is significantly affected by the discharge. The Division shall determine, at the Director's sole discretion, which counties are significantly affected by the discharge and shall approve the form and content of the notice and the newspapers in which the notice is to be published. The notice shall be captioned "NOTICE OF DISCHARGE OF ANIMAL WASTE". The minimum content of the notice is the location of the discharge, estimated volume, identification of the surface water or wetland affected, steps taken to prevent future discharges, and a phone number and contact name. [G.S. 143-215.10C(h)]

The Permittee shall publish the notice within 10 days after the Division has determined the counties that are significantly affected by the discharge and approved the form and content of the notice and the newspapers in which the notice is to be published. The Permittee shall file a copy of the notice and proof of publication with the Division within 30 days after the notice is published. [G.S. 143-215.10C(h)]

- 25. If a discharge of one million (1,000,000) gallons of animal waste or more reaches surface waters or wetlands, the appropriate Division Regional Office must be contacted to determine in what additional counties, if any, a public notice must be published. A copy of all public notices and proof of publication must be sent to the Division within thirty (30) days after the notice is published. [G.S. 143-215.10C(h)]
- 26. The Division may require any additional monitoring and reporting (including but not limited to groundwater, surface water or wetland, waste, sludge, soil, lagoon/storage pond levels and plant tissue) necessary to determine the source, quantity, quality, and effect of such waste upon surface waters, groundwaters or wetlands. Such monitoring, including its scope, frequency, duration, and any sampling, testing, and reporting systems, shall meet all applicable Environmental Management Commission and EPA requirements. [15A NCAC 02T .0108 (c)]
- 27. All monitoring, record keeping, and reporting required by this permit, the Permittee's COC, and any additional monitoring and reporting required by the Director shall be on forms supplied by or approved by the Director. Submittal of these reports shall be in paper and/or electronic format as required by the Director. [40 CFR 122.41 (l); 15A NCAC 02T .1305 (e)]
- 28. Within five (5) working days of receiving the request from the Division, the Permittee shall provide to the Division one (1) copy of all requested information and reports related to the operation of the animal waste management system. Once received by the Division, all such information and reports become public information, unless they constitute confidential information under state and federal law, and shall be made available to the public by the Division as specified in law. [15A NCAC 02T .0108 (c)]

# V. INSPECTIONS AND ENTRY

- 1. The Permittee shall allow any authorized representative of the Department of Environmental Quality (Department) or EPA, upon the presentation of credentials and other documents as may be required by law and in accordance with reasonable and appropriate biosecurity measures, to [40 CFR 122.41(i); 15A NCAC 02T .1305 (e)]:
  - a. Enter the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
  - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,
  - d. Sample or monitor, at reasonable times, for the purpose of assuring compliance or as otherwise authorized by the Act, any substances or parameters at any location.

#### VI. GENERAL CONDITIONS

- 1. In accordance with the provisions of 40 CFR Part 122.41 et seq., this Permit incorporates by reference all conditions and requirements applicable to NPDES permits set forth in the Act, as amended, as well as all applicable regulations.
- 2. The issuance of a COC to operate under this Permit shall not relieve the Permittee of the responsibility for compliance with all applicable surface water, wetlands, groundwater and air quality standards or for damages to surface waters, wetlands, or groundwaters resulting from the animal waste management system. [15A NCAC 02T .0113 (b)]
- 3. Any containment basin, such as a lagoon or a storage pond, used for waste management shall continue to be subject to the conditions and requirements of this Permit until properly closed. When the containment basin is properly closure, "April 2012, or any subsequent amendment, the containment basin shall not be subject to the requirements of this Permit or the Act. The Permittee must submit a letter to the Division to request rescission of the COC by providing documentation describing the procedures taken to close any containment basin. Closure shall also include pre-notification of the Division and submittal of the *Animal Waste Storage Pond and Lagoon Closure Report Form* to the Division's Animal Feeding Operations Program Central Office within fifteen (15) days of completion of closure. [15A NCAC 02T .0105 (j)]
- 4. The annual permit fee shall be paid by the Permittee within thirty (30) days after being billed by the Division. Failure to pay the fee accordingly constitutes grounds for revocation of its COC to operate under this Permit. [15A NCAC 02T .0105 (e)]
- 5. Failure of the Permittee to maintain, in full force and effect, lessee and landowner agreements, which are required in the CAWMP, shall constitute grounds for revocation of its COC to operate under this Permit. [15A NCAC 02T .0110]
- 6. A COC to operate under this Permit is not transferable. In the event there is a desire for the facility to change ownership, or there is a name change of the Permittee, a formal permit request must be submitted to the Division, including documentation from the parties involved and other supporting materials as may be appropriate. This request will be considered on its merits and may or may not be approved. [40 CFR 122.41 (l); 15A NCAC 02T .1305 (e)]
- 7. A COC to operate under this Permit is effective only with respect to the nature and volume of wastes described in the application and other supporting data. The Permittee shall notify the Division immediately of any applicable information not provided in the permit application. [G.S. 143-215.1]
- 8. Any proposed modification to an animal waste management system including the installation of lagoon covers shall require approval from the Division prior to construction. [G.S. 143-215.10C]
- 9. If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee must apply for and obtain a new COC. Renewal applications must be filed at least one hundred eighty (180) days prior to the expiration of the Permit. [15A NCAC 2T .0109]

- 10. The issuance of a COC to operate under this Permit does not prohibit the Division from reopening and modifying the Permit, revoking and reissuing the Permit, or terminating the Permit as allowed by the laws, rules, and regulations contained in 40 CFR Parts 122 and 123; Title 15A of the NCAC, Subchapter 02T .1300; and G.S. 143-215.1 and G.S. 215.10C. The filing of a request for a permit modification, revocation and reissuance, or termination; for a notification of planned changes; or for an anticipated noncompliance does not stay any Permit Condition. [15A NCAC 2T .0110]
- 11. The issuance of a COC under this Permit does not convey any property rights of any sort, 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/Tribal, or local laws or regulations. [40 CFR 122.41 (g); 15A NCAC 02T .1305 (e)]
- 12. The Director may require any person, otherwise eligible for coverage under this Permit, to apply for an individual NPDES permit by notifying that person that an application is required. Coverage by this Permit shall automatically terminate upon issuance of a NPDES individual permit. [40 CFR 122.28 (b)(3); 15A NCAC 2T .0111 (h); 15A NCAC 02T .1305 (e)]
- 13. The <u>COMPLIANCE BOUNDARY</u> for the disposal system is specified by regulations in 15A NCAC 2L, Groundwater Classifications Standards. The Compliance Boundary for a disposal system individually permitted on or after December 31, 1983, is established at either two hundred fifty (250) feet from the waste disposal area, or fifty (50) feet within the property boundary, whichever is closest to the waste disposal area. The exceeding of Groundwater Quality Standards at or beyond the Compliance Boundary is subject to immediate review action according to 15A NCAC 2L .0106(d)(2).

The <u>REVIEW BOUNDARY</u> is established around the disposal system midway between the Compliance Boundary and the perimeter of the waste disposal area. The exceeding of standards at the Review Boundary shall require action in accordance with 15A NCAC 2L .0106(d)(1).

# VII. <u>PENALTIES</u>

1. Failure to abide by the conditions and limitations contained in this Permit, the facility's COC, the facility's CAWMP, applicable state law, and/or the Act and their implementing regulations may subject the Permittee to an enforcement action by the Division and/or EPA including, but not limited to, the modification of the animal waste management system, civil penalties, criminal penalties, and injunctive relief. [40 CFR 122.41; 15A NCAC 02T .1305 (e)]

The Act and 40 CFR Part 122.41, as well as state law, provide that any person who violates a Permit condition is subject to civil penalties and administrative penalties. In addition, criminal penalties, including imprisonment, are provided for falsifying data, knowingly violating a Permit condition, or for negligence. [G.S. 143-215.6A, 6B, and 6C; 40 CFR 122.41; 15A NCAC 02T .1305 (e)]

- 2. The Permittee must comply with all conditions of this Permit. Any Permit noncompliance constitutes a violation of state law and the Act and is grounds for enforcement action; for coverage termination, revocation and reissuance, or modification; or denial of a renewal application. [G.S. 143-215.1; 40 CFR 122.41; 15A NCAC 02T .1305 (e)]
- 3. It shall not be a defense for a Permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit. [40 CFR 122.41; 15A NCAC 02T .1305 (e)]

#### VIII. <u>DEFINITIONS</u>

25-year, 24-hour rainfall or storm event means the maximum 24-hour precipitation event with a probable recurrence interval of once in twenty-five (25) years, as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

Act means the Federal Water Pollution Control Act as amended, also known as the Clean Water Act as amended, found at 33 USC 1251 et seq.

Agronomic rates means the amount of animal waste and/or other nutrient sources to be applied to meet the nutrient needs of the crop, but does not overload the soil with nutrients or other constituents that cause or contribute to a contravention of surface water or groundwater standards, limit crop growth, or adversely affect soil quality. Nutrient needs of the crop shall be based on realistic yield expectations (RYE) established for a soil series through published Cooperative Extension Service bulletins, NRCS publications, county soil surveys, or site-specific agronomist reports.

Animal Waste Management System means a system designed for the collection, treatment, storage, and application of animal waste.

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

Director means the Director of the North Carolina Division of Water Resources.

Ditch means any man made channel for the purpose of moving water off a site to surface waters.

Division means the North Carolina Division of Water Resources.

**Excessive Ponding** means any area of the application field where visible liquid waste is ponded on the surface of the land application site more than four (4) hours following the application of waste. Excessive ponding also means any areas where the ponding of waste has resulted in crop failure.

Groundwaters means any subsurface waters, as defined in 15A NCAC 2L .0102.

Land application means the application of animal waste onto or incorporation into the soil.

**Major modification** means a modification including a change in the number of animals above that are authorized by the COC; a change in type of operation; retrofit of a lagoon (including the installation of a cover); installation of a new irrigation system; any changes to field specific land application rates; the addition of new land area for waste application; a reduction in land application area; or changes in crops and/or cropping patterns, including addition of fields for sludge application.

Minor modification means a modification which is not a major modification.

**Process wastewater** means any process-generated wastewater and any precipitation (rain or snow) which comes into contact with any manure, litter or bedding, or any other raw material or intermediate or final material or product used in or resulting from the production of animal or poultry or direct products (e.g. milk, eggs).

**Process-generated wastewater** means any water directly or indirectly used in the operation of a feedlot for any of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning or flushing pens, barns, manure pits, or other feedlot facilities; direct contact swimming, washing or spray cooling of animals; and dust control.

**Surface Waters** means any stream, river, brook, swamp, lake, sound, tidal estuary, bay, creek, reservoir, waterway, or other surface body or surface accumulation of water, whether public or private, or natural or artificial, that is contained in, flows through, or borders upon any portion of the State of North Carolina, including any portion of the Atlantic Ocean over which the State has jurisdiction as well as any additional Waters of the United States which are located in the State.

Toxic pollutants means any pollutant listed as toxic under Section 307(a)(1) of the Act.

Waste means manure, litter, or water that comes in contact with manure or litter generated at an animal feeding operation.

Waters of the State means all surface waters, wetlands, groundwaters, and waters of the United States located in the State.

Wetlands means areas that are inundated or saturated by an accumulation of surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions, as defined in 15A NCAC 2B .0202.

This Permit issued the 5th day of December, 2016.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Decunci

S. Jay-Zimmerman, P.G., Director North Carolina Division of Water Resources By Authority of the Environmental Management Commission

NPDES Permit Number NCA300000

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