

**NORTH CAROLINA
ENVIRONMENTAL MANAGEMENT COMMISSION
DEPARTMENT OF ENVIRONMENTAL QUALITY**

SWINE WASTE MANAGEMENT SYSTEM GENERAL PERMIT

This General Permit is issued pursuant to North Carolina G.S. §143-215 et seq., and North Carolina Administrative Code Title 15A Subchapter 02T as adopted by the Environmental Management Commission for the operation of animal waste management systems. This General Permit may apply to any swine animal feeding operation in the State of North Carolina as defined by G.S. §143-215.10B that is not subject to G.S. §143-215.10I.

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

Holders of Certificates of Coverage (COC) under this General Permit shall comply with the following specified conditions and limitations.

This General Permit shall be effective from October 1, 2019 until September 30, 2024.

I. PERFORMANCE STANDARDS

1. Any discharge of waste that reaches surface waters or wetlands is prohibited except as otherwise provided in this General 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 through ditches, terraces, or grassed waterways not otherwise classified as state waters.

The waste collection, treatment, storage and application system operated under this General 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 surface waters or wetlands.

Facilities must be designed, constructed, operated, and maintained to contain all waste plus the runoff 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 General Permit if the facility is otherwise in compliance with its Certified Animal Waste Management Plan (CAWMP) and this General 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.

Any discharge or application of waste to a ditch that drains to surface waters or wetlands is prohibited except as follows:

- a. outflow 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 of Water Resources (Division);
- c. the BMPs were implemented as designed to prevent a discharge to surface waters or wetlands;
- d. inspections are conducted in compliance with Condition II.17;
- e. the waste was removed immediately from the ditch upon discovery; and
- f. the event was documented and reported in accordance with Condition III.14. of this General Permit.

[G.S. §143-215.10C]

2. This General Permit does not allow the Permittee to cause a violation of any of the water quality standards established pursuant to Title 15A, Subchapter 2B of the North Carolina Administrative Code and Title 15A, Subchapter 2L of the North Carolina Administrative Code.
3. The Permittee shall develop and maintain a current CAWMP. The facility's COC and CAWMP are hereby incorporated by reference into this General 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, design and certification of the facility. Any violation of the terms or conditions of the COC or the CAWMP (which includes the Odor Control Checklist) shall be a violation of this General Permit and subject to enforcement action and may result in the Permittee having to take immediate or long-term corrective action(s) as required by the Division. – [G.S. §143-215.6A and 15A NCAC 02T .1304(b)]
4. The Permittee must assess and record, on an ongoing basis, the effectiveness of the implementation of the CAWMP. The Permittee must make “major changes” or “revisions,” to the CAWMP, as defined in Section VII, “Definitions,” of this General Permit, to address any changes needed to maintain compliance with the facility's COC and this General Permit. “Major changes” and “Revisions,” to the CAWMP must be documented, dated, and included as part of the CAWMP. “Major changes” must be submitted to the Division's Central Office and be approved by the Division prior to making any changes. “Revisions” to the CAWMP shall be submitted to the Division's Central Office within thirty (30) calendar days of the “revision.” If field, riser or pull numbers are changed, an explanation shall also be submitted and include a description of how the new numbers relate to the old numbers. – [G.S. §143-215.10C, 15A NCAC 02T .0108(b) and .1304(b)]
5. A violation of this General Permit is subject to enforcement action and may result in the Permittee having to take immediate or long-term corrective action(s) as required by the Division. These actions may include but are not limited to: modifying the CAWMP; ceasing land application of waste; removing animals from the facility; or the COC being reopened and modified, revoked and reissued, and/or terminated. – [G.S. §143-215.6A and 15A NCAC 02T .0110]
6. Any proposed modification to operation type or the annual average design capacity from that authorized by the COC is considered a “Major change” will require a modification to the CAWMP and the COC prior to modification of the facility. – [G.S. §143-215.10C, 15A NCAC 02T .0108(b) and .1304(b)]
7. New swine operations and expansion of existing swine operations are not eligible for coverage under this General Permit. – [G.S. §143-215.10I, 15A NCAC 02T .1304(d) and .1307]
8. No collection, treatment or storage facilities may be constructed in a 100-year flood plain. – [G.S. §106-803(a2)]
9. Any land application field with a soil analysis P-index of 400 or higher must be evaluated for compliance with NC NRCS Standard 590 “Nutrient Management” as it relates to phosphorus using the NC Phosphorus Loss Assessment Tool (PLAT). PLAT must be run within twelve (12) months of receiving the high P-index soil analysis results. PLAT results must be documented on forms supplied by or approved by the Division and must be submitted to the Division. Per NC NRCS Standard 590, PLAT results are valid for five (5) years. – [15A NCAC 02T .0108(c)]

All fields with a “HIGH” PLAT rating shall have land application rates that do not exceed the established crop removal rate (agronomic rate) for phosphorous. There shall be no waste application on fields with a “VERY HIGH” PLAT rating. – [15A NCAC 02T .0108(b), *see also* NRCS Standard 590]

10. If prior approval is received from the Director of the Division (Director), facilities that have been issued a COC to operate under this General Permit may add treatment units for the purpose of removing pollutants before the waste is discharged into the lagoons/storage ponds. Prior to any approval, the Permittee must demonstrate to the satisfaction of the Director that the new treatment unit 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 02T .0105(n)]
11. If prior approval is received from the Director, facilities that have been issued a COC to operate under this General Permit may add innovative treatment processes to the systems on a pilot basis 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 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 02T .0105(n)]
12. Animal waste shall not be applied within 100 feet of any well with the exception of monitoring wells. The allowable distance to monitoring wells shall be established on a case-by-case basis by the Division. – [15A NCAC 02T .1304(b)(5)]
13. Existing swine dry lots may remain in wetlands as long as the wetlands uses are not removed or degraded as a result of the swine. The swine however may not be confined within 100 feet of an adjacent surface water or a seasonally-flooded area. The swine also must not cause a loss of more than 10% of the existing tree canopy. Where trees do not exist, the area must be managed to include crop rotation. – [15A NCAC 02T .0108(b)]

II. OPERATION AND MAINTENANCE REQUIREMENTS

1. The collection, treatment, and storage facilities, and the land application equipment and fields shall be properly operated and maintained at all times. – [15A NCAC 02T .1304(b)]
2. 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 .1304(b)]
3. Soil pH on all land application fields must be maintained in the optimum range for crop production. – [G.S. §143-215.10C(e)(7)]
4. Land application rates shall be in accordance with the CAWMP. In no case shall land application rates exceed the agronomic rate of the nutrient of concern for the receiving crop. – [G.S. §143-215.10C, and 15A NCAC 02T .1304(b)]
5. In no case shall land application result in excessive ponding or any runoff during any given application event. – [15A NCAC 02T .1304(b)]

6. Animal waste shall not be directly applied onto crops for direct human consumption that do not undergo further processing (e.g., strawberries, melons, lettuce, cabbage, apples, etc.) 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 .0108(b)]
7. If manure or sludges are applied on conventionally tilled bare soil, the waste shall be incorporated into the soil within one (1) day 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. In no case shall land application on such fields result in excessive ponding or any runoff during any given application event. – [15A NCAC 02T .0108(b)]
8. 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. – [15A NCAC 02T .1304(b)]
9. Domestic and/or industrial wastewater from showers, toilets, sinks, etc. shall not be discharged into the animal waste collection, treatment, storage, and application system. Washdown of stock trailers owned by and used to transport animals to and from the facility only, will be permissible if the system has been evaluated and approved to accommodate the additional volume. Only those cleaning agents and soaps that are EPA approved according to their label, 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 General Permit. Instruction labels are to be followed when using cleaning agents and soaps. – [15A NCAC 02T .0108(b) and .1304(b)]
10. Disposal of dead animals, which is the responsibility of the Permittee, 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. G.S. §143-215.10C(e)(3) requires the CAWMP to include provisions that set forth acceptable methods of disposing of mortalities. Disposal of dead animals, regardless of method, must occur within twenty-four hours after knowledge of the death as required by G.S. §106-403. Mortality records shall be kept daily to include number of animals by species/operation type and by disposal method. – [15A NCAC 02T .0108(c)]

Burial is not recommended for disposal of dead animals. Mortality management plans that utilize burial must include maps showing existing and planned burial locations with setbacks from surface waters, wells, and property lines. The Division may require groundwater monitoring for mortality burial sites. – [15A NCAC 02T .0108(c)]

For burial that either addresses mortality numbers that exceed the capacity of the primary mortality management method or when the primary/normal mortality management method is unable to be used, the facility shall:

- a. consult with the NCDA&CS Veterinary Division prior to burial;
- b. map the burial sites, showing burial locations and setbacks from surface waters, wells, and property lines;
- c. record the dates and numbers of the animals buried by species and type; and
- d. submit the map and burial records within fifteen (15) calendar days of burial to the Water Quality Regional Operations Section within the appropriate Regional Office.

[G.S. §106-403]

In the event of a state of emergency declared by the Governor, disposal of dead animals shall be done in accordance with the guidelines issued by the State Veterinarian. – *[G.S. §106-402.1]*

11. 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. – *[15A NCAC 02T .1304(b)]*
12. A protective vegetative cover shall be established and maintained on all earthen lagoon/storage pond embankments (outside toe of embankment to maximum pumping elevation on embankment interior), berms, pipe runs, and diversions to surface waters or wetlands with the goal of preventing erosion. Soil pH shall be maintained in the optimum range to maintain the protective vegetative cover. 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 kept mowed. – *[15A NCAC 02T .1304(b)]*
13. 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 from the lagoon is necessary, provisions must be taken to prevent damage to the lagoon dikes and liner. – *[15A NCAC 02T .1304(b)]*
14. 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)]*
15. 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 .0108(b)]*
16. The Permittee shall designate a certified animal waste management system operator with a valid certification to be in charge of the animal waste management system. The waste management system shall be operated by the Operator in Charge (OIC) or a person under the OIC's supervision. – *[G.S. §90A-47.2]*
17. The OIC, a designated Back-up OIC of a Type A Animal Waste Management System, 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 land applied in accordance with the CAWMP. In no case shall the time between inspections be more than 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, land application area used, and name of the operator for each inspection. If neither the OIC or designated Back-up OIC was present during land application, then the OIC or designated Back-up OIC shall inspect the land application area within twenty-four (24) hours.

Inspection shall include but not be limited to visual observation of application equipment, land application area, subsurface drain outlets, ditches, and drainage ways for any discharge of waste. – *[15A NCAC 8F .0203(b) and 15A NCAC 02T .0108(c)]*

18. Upon written notification from the Director, the Permittee shall install and operate automatic flow meters with flow totalizers. Notification may be based on the facility's violations, incomplete or incorrect record keeping events, or if the Division determines that flow estimation techniques do not effectively quantify volumes of waste applied. The equipment must be in place no later than ninety (90) days following receipt of notice from the Director. – *[15A NCAC 02T .0108(c)]*

19. No waste shall be applied in wind conditions that cause or might reasonably be expected to cause the mist to reach surface waters or wetlands or cross property lines or field boundaries. – [15A NCAC 02T .0108(b)]
20. Upon written notification from the Director, a Permittee shall install/utilize application equipment or methods that reduce drift potential. Written notification may be provided if the Division determines violations for application of waste outside of the land application area as specified in the facility's CAWMP due to wind drift. – [15A NCAC 02T .1304(b)]
21. 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. – [15A NCAC 02T .1304(b)]
22. 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 .1304(b)(7)]
23. Land application of waste is prohibited during precipitation events. The Permittee shall consider pending weather conditions in making the decision to land apply waste and shall document the weather conditions at the time of land application on forms supplied by or approved by the Division. – [15A NCAC 02T .1304(b)(8)]

Land application of waste shall cease within four (4) hours after the National Weather Service first issues a Hurricane Warning, Tropical Storm Warning, or a Flood Watch/Flash Flood Watch in advance of an associated tropical system including a hurricane, tropical storm, or tropical depression for the county in which the permitted facility is located. Watches and warnings are posted on the National Weather Service's website located at: www.weather.gov. More detailed website information can be found on Page 2 of the Certificate of Coverage. 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 Certificate of Coverage. – [15A NCAC 02T .0108(b)]

24. Permittees shall install, operate, and maintain devices on all irrigation pumps/equipment designed to automatically stop irrigation activities during precipitation within 12 months of the issuance of the Certificate of Coverage for this General Permit. The permittee shall maintain such devices according to the manufacturer's instructions and warranties. – [15A NCAC 02T .0108(b)]
25. 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). – [G.S. §143-215.10C(e)(6)]
26. All waste application equipment must be tested and calibrated at least once every year. The results must be documented on forms provided by, or approved by, the Division. – [15A NCAC 02T .1304(b)(9)]
27. Any major structural repairs to lagoons/storage ponds must have written documentation from a licensed Professional Engineer certifying proper design and installation. However, if a piece of equipment is being replaced with a piece of equipment of the identical specifications, no Professional Engineer's 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 or liner. – [15A NCAC 02T .0108(b)]

28. Crops for which animal waste is land applied must be harvested and removed from the land application site and properly managed and utilized unless other management practices are approved in the CAWMP. Hay stored outside should be fed by the end of the first winter after cutting; it shall be moved from the farm where it is cut within twenty-four (24) months of cutting. – [15A NCAC 02T .0108(b) and .1304(b)]
29. In accordance with NRCS North Carolina 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. All conditions of NRCS NC Standard No. 359 must be satisfied prior to lowering lagoon levels below designed stop pump levels. – [15A NCAC 02T .1304(b)]

III. 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 24 hours. For example, lagoons/storage ponds, and other structures should be inspected for evidence of erosion, leakage, damage by animals or discharge. Inspection shall also include visual observation of subsurface drain outlets, ditches, and drainage ways for any discharge of waste. Inspections of waste collection, treatment, and storage structures shall be conducted pursuant to the most recent DEQ Certification Training Manual for Operators of Animal Waste Management Systems, Chapter 5. – [15A NCAC 02T .0108(b)]
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. – [15A NCAC 02T .1304(b)(10)]

The waste level in each lagoon with a waste level gauge shall be monitored and recorded weekly on forms supplied by or approved by the Division. – [15A NCAC 02T .0108(c)]

The Director may require more frequent monitoring and recording of waste levels based on the facility’s compliance history for freeboard violations. – [15A NCAC 02T .0108(c)]
 - b. All waste-level gauges must be surveyed and certified that it complies with the structure design and the CAWMP at least once every five (5) years. Certification must be recorded on forms provided or approved by the Division. – [15A NCAC 02T .0108(b)]
 - c. Upon written notification from the Director, the Permittee shall monitor and record waste levels as described below. Written notification may be provided if the Division determines that waste level monitoring and recordkeeping do not adequately represent the volumes of waste in the structure to ensure appropriate management, if the facility experiences freeboard violations in two or more consecutive years, or as determined necessary by the Director. – [15A NCAC 02T .0108(c)]

In addition to the facility's existing lagoon waste-level gauges, automated lagoon/storage pond waste-level monitors and recorders (monitored and recorded at least hourly) must be installed on all treatment and storage structures covered by a COC issued under this General Permit to measure and record freeboard. This equipment must be properly maintained and calibrated in a manner consistent with manufacturer's operation and maintenance recommendations. This automated equipment must be in place no later than ninety (90) days following notification from the Director. The Director may determine that installation of automated waste level monitors is not required if the Permittee can demonstrate that preventative measures were taken to avoid the violations and that the violations resulted from conditions beyond the Permittee's control. – [15A NCAC 02T .0108(c)]

If an automated level monitor(s) becomes inoperable, the Permittee shall:

- i. report the problem 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 problem; and,
 - ii. make any needed repairs to the equipment as quickly as possible and take and record daily waste levels at the same time every day until such time as the automated equipment is placed back into operation.
- d. [15A NCAC 02T .0108(c)]The Director may require new or modified waste-level gauges at any facility if it is determined that the existing gauges are not adequate to accurately indicate actual lagoon levels, or the various lagoon levels required to be maintained by this General Permit or the facility's CAWMP. – [15A NCAC 02T .0108(c)]

3. Monitoring and Recording Precipitation Events

- a. Precipitation events at facilities issued a COC to operate under this General Permit shall be monitored and recorded as follows:

A rain gauge must be installed at a site that is representative of the weather conditions at the farm's land application site(s) to measure all precipitation events. The precipitation type and amount must be recorded daily for all precipitation events and maintained on site for review by the Department of Environmental Quality (Department). Daily records do not need to be maintained for those days without precipitation events. – [15A NCAC 02T .0108(c)]

- b. Upon written notification from the Director, the Permittee shall install an automated rain gauge and recorder on-site to measure and record all precipitation events. This equipment must be properly maintained and calibrated in a manner consistent with manufacturer's operation and maintenance recommendations. This automated equipment must be in place no later than ninety (90) days following receipt of notice from the Director. – [15A NCAC 02T .0108(c)]

If an automated rain gauge(s) becomes inoperable, the Permittee shall:

- i. report the problem 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 problem; and,
- ii. make any needed repairs to the equipment as quickly as possible and take and record all rainfall events until such time as the automated equipment is placed back into operation.

[15A NCAC 02T .0108(c)]

4. A representative Standard Soil Fertility Analysis, including pH, phosphorus, copper, and zinc, shall be conducted at least once every three (3) years on each application field receiving animal waste. – [G.S. §143-215.10C(e)(6)]
5. An analysis of a representative sample of the animal waste to be applied 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)(6)]

Nitrogen	Zinc
Phosphorus	Copper

6. The Permittee shall record all irrigation and land application event(s) including hydraulic loading rates, nutrient loading rates and cropping information. The Permittee shall also record removal of solids and document nutrient loading rates if disposed of on-site or record the off-site location(s). These records must be on forms supplied by, or approved by, the Division. – [G.S. §143-215.10C(e)(8)]
7. A record shall be created and maintained of all transfers of waste between waste structures on the same site not typically operated in series. Such record shall include at least the identity of the structure from which the waste was transferred, the identity of the structure receiving the waste, the date and time of transfer and the total volume of waste transferred. – [15A NCAC 02T .0108(c)]
8. The Permittee must maintain weekly stocking records for the facility. Records shall be kept on Division-supplied forms or forms approved by the Division and be made available to the Division consistent with Condition III.13. – [15A NCAC 02T .0108(c)]
9. If, for any reason, there is a discharge from the waste collection, treatment, storage and application systems (including the land application sites), to surface waters or wetlands, the Permittee is required to make notification in accordance with Condition III.14. The discharge notification shall include the following information:
 - 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.
 - 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 III. 5. above.
 - f. A waste sample, obtained within forty-eight (48) 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 bacteria	Five-day biochemical oxygen demand (BOD ₅)
Total suspended solids	Total phosphorous

Ammonia nitrogen (NH₃-N)
Nitrate nitrogen (NO₃-N)

Total Kjeldahl nitrogen (TKN) or Total Nitrogen

Samples shall be collected in accordance with methods described in Certification Training Manual for Operators of Animal Waste Management Systems, Chapter 4. Permittees shall contact a state certified laboratory to verify any sample preservation, handling, and time requirements for proper sample analysis. Monitoring results must be submitted to the Division within thirty (30) days of the discharge event.

[15A NCAC 02T .0108(b) and (c)]

10. Upon written notification by the Division, the Permittee shall undertake 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 animal waste upon the surface waters, groundwaters or wetlands. Such monitoring, including its scope, frequency, duration and any sampling, testing, and reporting systems, shall meet all applicable Division requirements. – *[15A NCAC 02T .0108(c)]*
11. The Division shall require groundwater monitoring when any of the following conditions exist, including but not limited to:
 - a. evidence that groundwater impacts to public or private water wells are occurring off-site;
 - b. evidence of migration of contaminated groundwater to off-site property or properties;
 - c. evidence of surface water impacts via groundwater.

[15A NCAC 02T .0108(b) and (c)]

12. A copy of this General Permit, the facility's COC, certification forms, lessee and landowner agreements, the CAWMP and copies of all records required by this General Permit and the facility's CAWMP shall be maintained by the Permittee in chronological and legible form for five (5) years. Records include but are not limited to: soil and waste analyses, 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 removal of solids to off-site location(s). These records shall be maintained on forms provided or approved by the Division and 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. – *[15A NCAC 02T .0108(c)]*
13. Within fifteen (15) 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 G.S. §132-1.2 or §143-215.9D, and shall be made available to the public by the Division as specified in Chapter 132 of the General Statutes.
14. Regional Notification:

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: – *[15A NCAC 02T .0108(b)]*

 - a. Failure of any component of the animal waste management system resulting in a discharge to ditches, 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 ditches, surface waters, or wetlands or an event that poses a serious threat to surface waters, wetlands, or human health and safety.
- 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 V.2. of this General Permit.
- f. Failure to maintain waste level in a lagoon/storage pond below that of the designed structural freeboard (twelve (12) inches from top of dam or as specified in lagoon/storage pond design). Note that this notification is in addition to the report required by Condition III.14.e above.
- g. An application of waste either in excess of the limits set out in the CAWMP or where runoff enters ditches, surface waters, or wetlands.
- h. Any discharge to ditches, surface waters, or wetlands or any discharge that poses a serious threat to the environment or human health or safety.

For any emergency, which 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. In the event of storage capacity violations as described in Condition III.14.e, the written report shall outline the actions proposed to be taken to restore compliance within thirty (30) calendar days. The requirement to file a written report may not be waived by the Division Regional Office. – [15A NCAC 02T .0108(c)]

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 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. – [15A NCAC 02T .0108(c)]

- 15. The Permittee shall submit an annual certification report. The report must be filed using the form in Attachment A. These reports will be kept on file at DEQ and made available for public review upon request. – [15A NCAC 02T .0108(b)]
- 16. In the event of a discharge of 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. A copy of the press release and a list of the news media to which it was distributed must be kept for at least one (1) year after the discharge and must be distributed to any person upon request. – [G.S. §143-215.10C(h)(1)]

The Permittee shall include the name of the facility, location of the discharge, estimated volume of waste water entering state waters, time and date discharge occurred, duration of the discharge, identification of water body that was discharged into including creek and river basin if applicable, actions taken to prevent further discharge, and a facility contact person and phone number. The Permittee shall provide a copy of the press release to DWR. *[15A NCAC 02T .0108(b)]*

17. In the event of a discharge of 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 III.16. The public notice must be placed in a newspaper having general circulation in the county in which the discharge occurred and the county immediately downstream within ten (10) days of the discharge. The notice shall be captioned “NOTICE OF DISCHARGE OF ANIMAL WASTE”. The minimum content of the notice is the name of the facility, location of the discharge, estimated volume of waste entering state waters, time and date discharge occurred, duration of the discharge, identification water body that was discharged into including creek and river basin if applicable, actions taken to prevent further discharge, and a facility contact person and phone number. The owner or operator shall file a copy of the notice and proof of publication with the Department within thirty (30) days after the notice is published. Publication of a notice of discharge under this Condition is in addition to the requirement to issue a press release under Condition III.16. Permittee must maintain a copy of the press release and the public notice consistent with Condition III.12. – *[G.S. §143-215.10C(h)(2)]*

18. If a discharge of 1,000,000 gallons or more of animal waste 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.

These requirements are in addition to those found in Conditions III.16 and III.17 above. The Permittee must maintain a copy of the public notice and proof of publication consistent with Condition III.12. – *[15A NCAC 02T .0108(b)]*

19. All facilities, which are issued a COC to operate under this General Permit, shall conduct a survey of the sludge accumulation in all lagoons every year. The survey report should be written on forms provided or approved by the Division and shall include a sketch showing the depth of sludge in the various locations within each lagoon. This 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. – *[15A NCAC 02T .0108(b) and .1304(b)]*

If the sludge accumulation is such that the structure does not satisfy the criteria set by NRCS NC Conservation Practice Standard No. 359, a sludge removal or management plan must be submitted to the appropriate Division Regional Office within ninety (90) days of the determination. The plan shall describe removal and waste utilization procedures to be used. Compliance regarding sludge levels must be achieved within two (2) years of the determination. – *[15A NCAC 02T .0108(b) and .1304(b)]*

IV. INSPECTIONS AND ENTRY

1. The Permittee is subject to inspections at any time, without announcement, by the Department. The Permittee shall allow any authorized representative of the Department, upon the presentation of credentials and other documents as may be required by law and in accordance with reasonable and appropriate biosecurity measures, to:
– *[G.S. §143-215.10F]*
 - 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 General Permit;

- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this General Permit;
- c. Inspect, at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this General Permit; and,
- d. Sample or monitor, at reasonable times, for the purpose of assuring permit compliance, any substances or parameters at any location.

V. GENERAL CONDITIONS

- 1. The issuance of a COC to operate under this General 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 operation. – [15A NCAC 02T .0111(c)]
- 2. The maximum waste level in lagoons/storage ponds shall not exceed that specified in the facility's CAWMP. At a minimum, maximum waste level for lagoons/storage ponds must not exceed the level that provides adequate storage to contain the 25-year, 24-hour storm event plus an additional one (1) foot of structural freeboard 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) there is at least one (1) foot of structural freeboard. – [15A NCAC 02T .1304(b), also see NC NRCS Standard 359]

In addition to the above requirements, for farms with lagoon and storage pond designs completed after September 1, 1996, storage must also be provided for the heavy rainfall factor for the lagoons/storage pond. In case of lagoons/storage ponds in series that are gravity fed, the 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 structure in the system. – [15A NCAC 02T .1304(b), also see NC NRCS Standard 359]

- 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 General Permit until properly closed. When the containment basin is properly closed in accordance with the NRCS NC Conservation Practice Standard No. 360 "Closure of Waste Impoundments," April 2012 or any subsequent amendment, the containment basin shall not be subject to the requirements of this General Permit. The Permittee must submit a letter to the Division to request rescission of the COC by providing documentation of closure of all containment basins. – [15A NCAC 02T .1306(a)]

Closure shall also include a minimum of 24 hours pre-notification of the Division and submittal of the Animal Waste Storage Pond and Lagoon Closure Report Form to the address identified on the form within fifteen (15) days of completion of closure. – [15A NCAC 02T .0108(b)]

- 4. This General Permit allows for the distribution of up to four (4) cubic yards of manure per visit to individuals for personal use. The maximum distribution of manure per individual for personal use is ten (10) cubic yards per year. The Permittee must provide the recipient(s) with information on the nutrient content of the manure. Distribution of greater quantities must be to individuals or businesses permitted to distribute the waste, or to be land applied to sites identified in the Permittee's CAWMP. – [15A NCAC 02T .0108(b)]

- The Permittee must inform the recipient(s) of his/her responsibilities to properly manage the land application of manure. Record keeping for the distribution of manure up to four (4) cubic yards per visit or ten (10) cubic yards per year to individuals for personal use is not required. – [15A NCAC 02T .0108(c)]
5. 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 General Permit. – [G.S. §143-215.10G and 15A NCAC 02T .0105(e)(2)]
 6. 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 General Permit. – [15A NCAC 02T .0110(1)]
 7. A COC to operate under this General 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 Notification of Change of Ownership form must be submitted to the Division, including documentation from the parties involved and other supporting materials as may be appropriate. This request shall be submitted within sixty (60) days of change of ownership. The request will be considered on its merits and may or may not be approved. – [G.S. §143-215.10C and 15A NCAC 02T .1304(c)]
 8. A COC to operate under this General 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]

Any proposed modification to an animal waste management system including the installation of lagoon covers shall require approval from the Division prior to construction.
 9. If the Permittee wishes to continue an activity regulated by this General Permit after the expiration date of this General Permit, the Permittee must apply for and obtain a new COC. Renewal applications must be filed at least 180 calendar days prior to the expiration of the General Permit. – [15A NCAC 02T .0109]
 10. The issuance of a COC to operate under this General Permit does not prohibit the Division from reopening and modifying the General Permit or COC, revoking and reissuing the General Permit or COC, or terminating the General Permit or COC as allowed by the appropriate laws, rules, and regulations. – [15A NCAC 02T .0110]
 11. The Director may require any person, otherwise eligible for coverage under this General Permit, to apply for an individual permit by notifying that person that an application is required. – [G.S. §143-215.10C(a) and 15A NCAC 02T .0111(h)]
 12. The Permittee must comply with 15A NCAC 02D .1806 – Control and Prohibition of Odorous Emissions.
 13. The Groundwater Compliance Boundary is established by 15A NCAC 2L .0102 and 15A NCAC 2T .0103. An exceedance of Groundwater Quality Standards at or beyond the Compliance Boundary is subject to the requirements of 15A NCAC 2L and the Division in addition to the penalty provisions applicable under the North Carolina General Statutes.
 14. Upon abandonment or depopulation for a period of five (5) years or more, the Permittee must satisfy all the follow prior to restocking the facility: – [15A NCAC 02T .1302(3)]
 - a. The Permittee must notify the Division in writing at least 60 days prior to bringing any animals back onto the site;

- b. The facility has not been abandoned or depopulated for more than ten (10) years;
- c. At the time the system ceased operation, the animal operation was in compliance with an individual or a general permit issued pursuant to G.S. §143-215.10C;
- d. The facility has maintained coverage under an individual permit or a COC under a general permit;
- e. The Division issues an individual permit or a COC under a general permit issued pursuant to G.S. §143-215.10C for the animal operations before any animals are brought on the facility;
- f. The permit for the animal waste management system does not allow the production, measured by steady state live weight (SSLW), to exceed the greatest SSLW previously permitted under G.S. §143-215.10C;
- g. No component of the animal waste management system, other than existing swine barns or land application sites shall be constructed within the 100-year floodplain; and
- h. The inactive animal waste management system was not closed using the expenditure of public funds and was not closed pursuant to a settlement agreement, court order, cost share agreement, or grant condition.

VI. PENALTIES

- 1. Failure to abide by the conditions and limitations contained in this General Permit; the facility's COC; the facility's CAWMP; and/or applicable state law; may subject the Permittee to an enforcement action by the Division including but not limited to the modification of the animal waste management system, civil penalties, criminal penalties and injunctive relief. – *[15A NCAC 02T .0110]*
- 2. The Permittee must comply with all conditions of this General Permit. Any permit noncompliance constitutes a violation of state law and is grounds for enforcement action; for permit coverage termination, revocation and reissuance, or modification; or denial of a permit coverage renewal application. – *[15A NCAC 02T .0110]*
- 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 General Permit. – *[15A NCAC 02T .0108(b)]*

VII. DEFINITIONS

25-year, 24-hour rainfall or storm event means the maximum 24-hour precipitation event with a probable recurrence interval of once in 25 years, as defined by the National Oceanic and Atmospheric Administration Atlas 14 (NOAA 14), Volume 2, version 3.0, 2004 revised 2006, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom. – *[NC NRCS Title 210 – National Engineering Handbook (NEH), Part 650 Engineering Field Handbook Chapter 2 (EFH-2), North Carolina Supplement, October 2017]*

Agronomic rate means the amount of animal waste and/or other nutrient sources to be applied to lands as outlined in NRCS NC Conservation Practice Standards No. 590 “Nutrient Management” or as recommended by the NCDA&CS and the North Carolina Cooperative Extension Service at the time of certification of the Animal Waste Management Plan by the appropriate certified technical specialist. Unless otherwise specified, nitrogen shall be rate-determining element. - *[G.S. §143-215.10C(e)(6) and 15A NCAC 02T .1304(b)]*

Animal feeding operation means a lot or facility (other than an aquatic animal production facility) where the following conditions are met: (i) animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of forty-five (45) days or more in any twelve (12) month period, and (ii) crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility. Two or more animal feeding operations under common ownership are considered to be a single animal feeding operation if they adjoin each other, or if they use a common area or system for the disposal of wastes. – [G.S. §143-215.10B]

Certification means technical specialist certification of the CAWMP in accordance with the requirements of 15A NCAC 02T .1304. It is unrelated to terms “Annual Certification” as used in Condition III.15 of this General Permit.

Discharge is defined by G.S. §143-213, which states, “Whenever reference is made in this Article to “discharge” or the “discharge of waste,” it shall be interpreted to include discharge, spillage, leakage, pumping, placement, emptying, or dumping into waters of the State, or into any unified sewer system or arrangement for sewage disposal, which system or arrangement in turn discharges the waste into waters of the State. A reference to “discharge” or “discharge of waste” shall not be interpreted to include “emission” as defined in Subdivision (12) of this Section.” – [G.S. §143-213(9)]

Ditch means any man-made channel for the purpose of moving water off a site to the surface waters. – [15A NCAC 02T .0108(b)]

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. – [15A NCAC 02T .0108(b)]

Expansion means an increase in the permitted steady state live weight associated with the animal waste management system. – [15A NCAC 02T .1302(4)]

Facility means an animal feeding operation including confinement areas, waste collection areas, waste treatment areas, waste storage areas, and land application areas. – [15A NCAC 02T .0108(b)]

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

Land application area means the areas used for the application of animal wastewater or waste solids. – [15A NCAC 02T .0108(b)]

Land application means the application of wastewater and/or waste solids onto or incorporation into the soil at no greater than agronomic rates for utilization of nutrient by crops. – [15A NCAC 02T .0108(b)]

Major changes to the CAWMP means changes in the number of animals, type of operation (feeder to finish to wean to feeder), retrofit of a lagoon, installation of a new irrigation system, and similar type changes. Recertification is only required for major changes to the CAWMP. Major changes to a facility must first be approved by the Division. The new CAWMP and the certification shall be submitted with a request that the COC be amended to reflect the changes. The facility may not make the changes until a new or amended COC has been issued. – [15A NCAC 02T .0108(b) and .1304(b)]

Revision to the CAWMP means a change to an entire CAWMP to meet current applicable standards. A CAWMP must be revised if the operation cannot utilize all N nitrogen generated by the animal production in accordance with the existing CAWMP, except for the specific conditions noted in the CAWMP amendment criteria as previously defined. For an existing CAWMP, a change in crops and/or cropping pattern that utilizes more than 25% of the N generated by the operation is considered a plan revision. Any change to an existing CAWMP, whether an amendment or revision, must be signed and dated by both the producer and a technical specialist for the new CAWMP to be valid. A revision of the CAWMP does not require recertification. – [15A NCAC 02T .0108(b) and .1304(b)]

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

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. – [15A NCAC 02T .0103(40)]

Waste means manure, animal waste, process wastewater and/or sludge generated at an animal feeding operation. – [G.S. §143-215.10B(2)]

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. – [15A NCAC 02T .0103(46)]

This General Permit issued the __ day of ____, 2019.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

_____, Interim Director
Linda Culpepper
North Carolina Division of Water Resources
By Authority of the Environmental Management Commission

Permit Number AWG100000