NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION DEPARTMENT OF ENVIRONMENTAL QUALITY

SWINE FARM DIGESTER WASTE MANAGEMENT SYSTEM GENERAL PERMIT

This General Permit is issued pursuant to North Carolina Session Laws 2023-63 and 2021-78, North Carolina G.S. §143-215.10C 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. meeting the following criteria:

- a. Swine Animal Waste Management Systems serving 250 or more swine;
- b. Utilizes a Farm Digester System as defined by G.S. §143-213(12a); and
- c. Utilizes non-discharge methods of disposal as authorized in 15A NCAC 02T Section .1300.

The Director may require any person, otherwise eligible for coverage under this General Permit, to apply for an individual permit as provided by G.S. §143-215.10C(a) and 15A NCAC 02T .0111 (h). Reasons for requiring application for an individual permit may include but is not limited to:

- a. the operation is a significant contributor of pollutants to the waters of the state;
- b. conditions at the permitted site change, altering the constituents or characteristics of the wastewater such that the operation no longer qualifies for coverage under a general permit;
- c. noncompliance with the General Permit;
- d. noncompliance with Administrative Code 15A NCAC 02T;
- e. a change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the operation;
- f. a determination by the Division that there has been or is the potential to have a direct discharge of wastewater, sludge or residuals to waters of the state; or
- g. the system has been allowed to deteriorate or leak such that it poses an immediate threat to the environment.

[G.S. §143-215.10C(a)]

Conditions and Limitations included in the issued Certificate of Coverage (COC) are incorporated as permit conditions for coverage under the general permit. Violation of conditions or limitations established in the COC are enforceable under the authority of this General Permit.

Any owner or operator not wishing to be covered or limited by this General Permit may <u>make applicationapply</u> for an individual permit in accordance with procedures in 15A NCAC 2T <u>.0106 and 15A NCAC 02T Section</u>. θ 1300.

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

Holders of Certificates of Coverage under this General Permit shall comply with the following specified conditions and limitations. References at the end of each condition are for information only but do not constitute permit conditions.

This General Permit does not relieve the Permittee of the obligation to contact the appropriate Division of Air Quality (DAQ) Regional Office if the potential to emit from flares or other industrial operations exceed permitting or registration thresholds in 15A NCAC 02Q .0102(d) and (e).

This General Permit shall be effective from July 1, 2022 October 1, 2024 until September 30, 2024 2029.

I. <u>PERFORMANCE STANDARDS</u>

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 <u>farm digester animal</u> 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 mustshall be designed, constructed, operated, and maintained to contain all waste plus the runoff from a 25-year, 24-hour rainfall event at the time of construction 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.

Any application of waste to a ditch that drains to surface waters or wetlands is prohibited unless all of the following are met:

- a. 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 of waste 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.17. of 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. -[G.S. \$143-215.10C(b)]

- 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 COC₁-and CAWMP, and any Plan of Action (POA), sludge plan, or monitoring plan required by this General Permit are hereby incorporated by reference into this General Permit. The CAWMP mustshall 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-or₁ the CAWMP, POA, sludge plan, or monitoring plan is a violation of this General Permit subject to enforcement action and may result in the Permittee having to take immediate and/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 <u>mustshall</u> assess and record, on an ongoing basis, the effectiveness of the CAWMP. The Permittee <u>mustshall</u> make "major changes," "revisions," or "amendments" to the CAWMP to address changes needed to maintain compliance with the facility's COC and this General Permit.

"Major changes," "revisions," and "amendments" to the CAWMP <u>mustshall</u> be documented, signed and dated by the Permittee and a technical specialist, and included as part of the CAWMP. "Major changes" require recertification of the CAWMP by a technical specialist or other appropriate professional. The new CAWMP and the recertification shall be submitted with a request that the COC be amended to reflect the changes. The facility may not make the changes until approved by the Division and a new or amended COC has been issued.

"Revisions" and "amendments" mustshall adhere to the current applicable standard; recertification of the <u>CAWMP</u> is not required. "Revisions" and "amendments" mustshall be submitted to the Division's Central Office within thirty (30) calendar days. A CAWMP mustshall be revised if the operation cannot utilize all Nitrogen generated by the animal production in accordance with the existing CAWMP. If field, riser or pull numbers are changed, an explanation shall also be submitted and include an updated irrigation/land application map with 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 <u>current</u> COC is considered a "major change" and 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 <u>farm digester animal waste</u> collection, treatment or storage <u>system</u> facilities may be constructed in a 100-year floodplain. Renovation or construction of a farm digester system shall not be allowed in the 100-year floodplain. -[G.S. \$106-803(a2); \$106-806(e)(4)]
- 9. Any land application field with a soil analysis P-index of 400 or higher mustshall 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 mustshall be completed within twelve (12) months of receiving the high P-index soil analysis results or January 1, 2021-2026 whichever is later. The Permittee may make one or more requests for extensions of up to three months each. Extension requests shall be submitted to the Division in writing and justify why the extension is needed. PLAT results mustshall be documented on forms/reports generate by the PLAT software or as supplied by or approved by the Division and mustshall be submitted to the Division's Central Office within thirty (30) days of completion. 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 for phosphorus. There shall be no waste application on fields with a "VERY HIGH" PLAT rating. – [15A NCAC 02T .0108(b), see also NC 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 to the existing animal waste management system for the purpose of removing pollutants or improve how the waste is treated and/or managed-before the waste is discharged into the lagoons/storage ponds. Prior to any approval, the Permittee mustshall 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 <u>existing animal waste management</u> 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 approval, the Permittee <u>mustshall</u> 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:
 - a. 100 feet of any well except for 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)]
 - b. 25 feet from a perennial stream or perennial waterbody for swine animal feeding operations sited or expanded prior to September 30, 1995; -[15A NCAC 02T.1304(b)(6)]
 - c. 50 feet from any perennial stream or river, other than an irrigation ditch or canal, for swine animal feeding operations sited after September 30, 1995 and constructed or expanded before August 27, 1997;
 [NC Session Law 1995-420]
 - d. 75 feet from any perennial stream or river, other than an irrigation ditch or canal, for any land application area for swine animal feeding operations that is first put in use after August 27, 1997; [G.S. 106-803 and NC Session Law 1997-458]
 - e. 200 feet from a dwelling not owned by the Permittee at the time waste was first applied at the land application site. -[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 <u>mustshall</u> not cause a loss of more than 10% of the existing tree canopy. Where trees do not exist, the area <u>mustshall</u> be managed to include crop rotation. [15A NCAC 02T.0108(b)]
- 14. Digester design shall meet the criteria in NC NRCS Standard 366 Anaerobic Digester and NC NRCS Standard 367 Roofs and Covers effective at the time of development/design and initial permit issuance where applicable. -[15A NCAC 02T .1304(b)(1)]
- 15. Lift stations, mixing stations, pumping stations, and similar open structures that do not have designed emergency overflow to waste treatment/storage structures or barns require secondary containment structures to prevent discharge to Waters of the state. – [15A NCAC 02T.0108(b)]
- 15.16. Upon completion of construction and prior to operation of a new Farm Digester System, as-built plans and specifications and the certification, signed and sealed by a Professional Engineer, mustshall be submitted certifying that the permitted Farm Digester System has been installed in accordance with the submitted design, this General Permit, and applicable engineering standards. Mail-Submit the attached Engineer's Certification form by mail to the Animal Feeding Operations Unit, 1636 Mail Service Center, Raleigh, NC 27699-1636 or by email to Animal.Operations@deq.nc.gov. [15A NCAC 02T .0116]

The Permittee shall retain the Division-approved plans and specifications for the life of the facility. -[15A NCAC 02T.0105(o)]

17. Session Law 2023-63 requires that the gases collected by a farm digester system shall be used as a renewable energy resource as quickly as feasible, but no later than within six (6) months of the collection of the gases. Until the gases are being used as a renewable energy resource, the gases shall be flared rather than vented.

The Permittee shall notify the Division in writing by mail or email as described in Condition I.16 above within ten (10) days of each of the following events:

a. digester cover installation is complete with waste inside the digester, and

b. when the use of gases as a renewable energy resource begins.

<u>-[G.S. 143-213(12a)]</u>

- 16.18. The appropriate Division Regional Office mustshall be notified at least seventy-two (72) hours in advance of operation of the installed Farm Digester System so that an in-place inspection can be made. Such notification to the Regional Supervisor shall be made during the normal office hours from 8:00 a.m. until 5:00 p.m. on Monday through Friday, excluding State Holidays and weekends. [15A NCAC 02T.0108(b)]
- 17.19. The waste management system, including the Farm Digester System and the land application system, shall be effectively maintained and operated at all times so that there is no discharge to surface waters or violation of groundwater standards. In the event that the Farm Digester System fails to perform in compliance with this General Permit, the Permittee shall take immediate corrective actions including those actions that may be required by the Division. [15A NCAC 02T .0108(b)]

II. <u>OPERATION AND MAINTENANCE REQUIREMENTS</u>

- 1. The <u>farm digester animal waste</u> collection, treatment, and storage facilities, and <u>the</u>-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 $\frac{\text{must} \text{shall}}{\text{must} \text{shall}}$ 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 the total land application rates from all nutrient sources (including but not limited to digestate, effluent, sludge, compost, and inorganic fertilizers) 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 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 .0108(b)]
- 8. No material other than animal <u>wasteswaste</u> of the type generated on this facility shall be disposed of in the <u>farm digester</u> animal waste collection, treatment, storage, or application systems. This includes but is not limited to <u>animal mortality</u>, food waste, human waste, <u>septage</u>, pesticides, toxic chemicals and petroleum products.

The biogas condensate generated by the biogas dryers may be returned to the farm digester system as it serves to recycle moisture from the existing waste stream. The condensate collection system mustshall be designed to prevent the introduction of precipitation, runoff, wastes, or any chemicals other than those necessary for system maintenance. – [15A NCAC 02T.1304(b)]

- 9. Domestic and/or industrial wastewater from showers, toilets, sinks, etc. shall not be discharged into the <u>farm digester</u> 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 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.

Disposal of dead animals <u>mustshall</u> occur within twenty-four (24) hours after knowledge of the death in a manner approved by the State Veterinarian. Proposed methods for disposal of mortality that extends beyond twenty-four (24) hours <u>mustshall</u> be approved by the State Veterinarian. Burial is not recommended for disposal of dead animals. Mortality management plans that utilize burial <u>mustshall</u> include maps showing existing and planned burial locations with setbacks from surface waters, wells, and property lines. <u>Burial is not allowed in the 100-year floodplain</u>. The Division may require groundwater monitoring for mortality burial sites.

For animal carcass disposal that addresses catastrophic mortality (as defined by NCDA&CS Veterinary Division), 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. Report the loss to the NCDA&CS Veterinary Division within 24-hours of the mortality event.
- b. If burial is the disposal method, then also:
 - i. consult with the Division and NCDA&CS Veterinary Division prior to burial;
 - ii. map the burial sites, showing burial locations and setbacks from surface waters, wells, and property lines;
 - iii. record the dates and numbers of the animals buried by species and type; and
 - iv. 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. §143-215.10C(e)(3) and §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]

<u>11.</u> 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)]

<u>Collected rainwater on flexible covers shall be removed at a frequency to prevent damage to the cover. The outlet for the rainwater shall be designed to prevent erosion and to divert the rainwater away from waste lagoons/storage ponds to prevent any unnecessary addition to the liquid volume in the structures. – [15A NCAC 02T .0108(b)]</u>

DRAFT - Permit Number AWG400000

- 11.12. A protective vegetative cover shall be established and maintained on all earthen lagoon/storage pond embankments (outside toe of embankment to maximum operating level/compliance level on embankment interior), berms, pipe runs, and storm water diversions with the goal of preventing erosion. 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)]
- 12.13. At the time of sludge removal from a lagoon/storage pond, the sludge <u>mustshall</u> be managed in accordance with the CAWMP. When removal of sludge from the lagoon is necessary, provisions <u>mustshall</u> be taken to prevent damage to the lagoon dikes and liner. [15A NCAC 02T .1304(b)]
- 13.14. 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)]
- 14.15. The facility mustshall have at least one of the following items at all times:
 - a. adequate <u>operable</u> 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)]

- <u>15.16.</u> 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 animal waste management system, including the Farm Digester System, shall be operated by the Operator in Charge (OIC) or a person under the OIC's supervision. -[G.S. \$90A-47.2]
- 16.17. 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)]

- 17.18. Upon written notification from the Director, the Permittee shall install and operate automatic flow meters with flow totalizers or other flow monitoring equipment approved by the Division. The Permittee shall maintain such devices according to the manufacturer's instructions and warranties. The equipment mustshall be in place no later than ninety (90) days following receipt of notice from the Director. 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. This determination shall be made on a case-by-case basis. [15A NCAC 02T.0108(c)]
- 18.19. No waste shall be applied in wind conditions that cause or might reasonably be expected to cause the waste to reach surface waters, wetlands, or cross property lines, or field boundaries. [15A NCAC 02T .0108(b)]
- <u>19.20.</u> Upon written notification from the Director, the Permittee shall install/utilize application equipment or practices that reduce drift potential. Written notification may be provided if the Division determines violations due to wind drift. This determination shall be made on a case-by-case basis. [15A NCAC 02T .1304(b)]

- 20.21. 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)]
- 21.22. 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)]
- 22.23. 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 twelve (12) 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. This requirement is intended to have all land application of animal waste end approximately twenty-four (24) hours in advance of the onset of the storm event.

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)]

23.24. The Permittee shall:

- a. install, operate, and maintain devices on all irrigation pumps/equipment designed to automatically stop irrigation activities during precipitation; or
- b. commit to provide for the presence of the OIC, a designated backup OIC, or a person under the supervision of an OIC or designated Back-up OIC at all times during the land application of waste so that in case of a precipitation event, the land application activities will be stopped immediately. This commitment mustshall be submitted in writing to the Division on a form supplied by, or approved by, the Division. -[G.S. \$90A-47]

Installation of devices or submission of alternate documentation shall be completed within 12 months of the issuance of the COC for <u>coverage under</u> this General Permit. The Permittee shall maintain such devices according to the manufacturer's instructions and warranties. This Condition does not apply to manure spreaders or other equipment pulled by manned vehicles. -[15A NCAC 02T.0108(b)]

- 24.25. If liquid effluent samples show that additional land will be necessary for application of nitrogen at agronomic rates, the Permittee will take immediate action which will require revision and/or recertification of the CAWMP. This action shall include one of the following:
 - a. preparing additional land at the site for land application of wastewater or solids;
 - b. acquiring leased land agreements for land application of wastewater or solids;
 - c. decrease the animal population to that which creates a balance between nutrients produced and utilization on the existing land application and crops; or
 - d. any other method approved by the Division.

[15A NCAC 02T .1304(b)]

- 25.26. Land application activities shall cease on any application site that exceeds a Mehlich 3 Soil Test Index for Copper of greater than 3,000 or Zinc of greater than 3,000. [G.S. §143-215.10C(e)(6)]
- 26.27. All waste application equipment, including flow meters, mustshall be tested and calibrated at least once every two calendar years. The results mustshall be documented on forms provided by, or approved by, the Division. [15A NCAC 02T .1304(b)(9)]

- 27.28. Any major structural repairs to lagoons, storage ponds, or digesters mustshall have written documentation certifying proper design and installation. Professional engineers, authorized federal employees, and technical specialists with Structural Animal Waste designation may provide certification. However, if a piece of equipment is being replaced with a piece of equipment of the identical specifications, no-e certification 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, or digester embankment or liner. [15A NCAC 02T .0108(b)]
- 28.29. Crops for which animal waste is land applied mustshall be harvested, removed from the land application site, and properly managed and utilized unless other management practices are approved in the CAWMP. Hay harvested from land application fields shall be removed within twenty-four (24) months of cutting unless other management practices are approved in the CAWMP. [15A NCAC 02T.0108(b) and .1304(b)]
- 29.30. 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. The following conditions <u>mustshall</u> be satisfied prior to lowering lagoon levels below designed stop pump levels.
 - a. Lagoon levels may be lowered a maximum of 8 inches below the facility's stop pump mark during the period of June 15 through October 31
 - b. This option shall be limited to lagoons having a minimum of 4 feet of liquid above the sludge layer. The measurement shall be taken from the stop pump level, at the pump intake, prior to pumping below the stop pump level.
 - c. All applications <u>mustshall</u> be in conformance with the CAWMP developed for the operation, including adherence to the planned nutrient application rates.
 - d. From November 1 through June 14, pumping from the lagoon will not be permitted when the lagoon level is at or below the stop pump elevation.
 - e. The following information concerning the pump down conditions shall be recorded and maintained on site:
 - i. Date the lagoon was first pumped below the stop pump level;
 - ii. Depth of liquid between the stop pump level and the sludge layer prior to pumping below the stop pump mark. Measured from the stop pump level near the pump intake location but off the inside slope of the embankment;
 - iii. Date pump down was completed; and
 - iv. Depth of pump down below the stop pump level. Measured weekly until the lagoon returns to the stop pump level.

[15A NCAC 02T .1304(b)]

- 31. Collected rainwater on flexible covers shall be removed at a frequency to prevent damage to the cover. The outlet for the rainwater shall be designed to prevent erosion. [15A NCAC 02T .0108(b)]
- <u>32.31.</u> In the case of interruption or failure of <u>the</u> Farm Digester System, the Permittee shall follow the Emergency Action Plan (EAP) as submitted. <u>– [15A NCAC 02T .0108(b)(1) and 15A NCAC 02T .1304(b)]</u>

III. MONITORING AND REPORTING REQUIREMENTS

- 1. An inspection of the <u>farm digester animal</u> 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, digesters, lagoons/storage ponds, and other structures <u>shouldshall</u> be inspected for evidence of erosion, leakage, rainfall accumulation on digesters/covered lagoons, damage by animals or discharge. Inspection shall also include visual observation of subsurface drain outlets, ditches, and drainage ways for any discharge of waste. [15A NCAC 02T .1304(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)]

Upon written notification from the Director, more frequent monitoring and recording of waste levels may be required based on the facility's compliance history for freeboard violations. This determination shall be made on a case-by-case basis. -[15A NCAC 02T .0108(c)]

- b. All waste-level gauges <u>mustshall</u> be certified, at least once every five (5) years, that it complies with the structure design and CAWMP, is representative of the low point of the lagoon embankment, and accurate to within 1/10 of a foot. Certification <u>mustshall</u> 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 <u>the current</u> waste level monitoring and recordkeeping do not adequately represent the volumes of waste in the structure to ensure appropriate management. This determination shall be made on a case-by-case basis. [15A NCAC 02T .0108(c)]

In addition to the facility's existing lagoon waste-level gauges, automated lagoon/storage pond wastelevel monitors and recorders (monitored and recorded at least hourly) <u>mustshall</u> be installed on all treatment and storage structures covered by a COC issued under this General Permit to measure and record freeboard. This equipment <u>mustshall</u> be properly maintained and calibrated in a manner consistent with manufacturer's operation and maintenance recommendations. This automated equipment <u>mustshall</u> 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. 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. A rain gauge <u>mustshall</u> be installed at a site that is representative of the weather conditions at the farm's land application site(s). Daily records of precipitation type and amount <u>mustshall</u> be recorded 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 to measure and record all precipitation events. This equipment <u>mustshall</u> be properly maintained and calibrated in a manner consistent with manufacturer's operation and maintenance recommendations. This automated equipment <u>mustshall</u> be in place no later than ninety (90) days following receipt of notice from the Director. Written notification may be provided if the Division determines that precipitation measurements and recordkeeping do not adequately represent precipitation at the facility. This determination shall be made on a case-by-case basis. [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 mustshall 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 <u>mustshall</u> maintain weekly stocking and mortality 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.15. [15A NCAC 02T .0108(c)]
- 9. If, for any reason, there is a discharge from <u>any component of</u> the <u>farm digester animal</u> waste collection, treatment, storage and application systems (including the land application sites), to surface waters or wetlands, the Permittee is required to make notification <u>to the appropriate Division Regional Office by</u> <u>telephone</u> in accordance with Condition III.17. 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<u>, recover</u>, 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.

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

- 10. Upon written notification by the Director, 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. Notification shall be made on a case-by-case basis. [15A NCAC 02T.0108(c)]
- 11. Within three (3) months written notification from the Director, facilities Facilities with existing lagoons/waste storage structures located in the 100-year floodplain submit a site-specific groundwater monitoring plan to the Division. The plan shall be sufficient to evaluate whether the lagoons/waste storage structures are causing or contributing to groundwater contamination. shall complete wWell installation and collection of initial samples of on-site groundwater monitoring shall begin within six (6) months of receiving notification from theplan approval by the Division, 's Regional Office of the well installation requirements and well locations.

The groundwater monitoring shall be conducted with monitoring wells installed upgradient and downgradient of each lagoon/storage pond in the 100-year floodplain.

<u>The</u> Permittee may request exemption from this condition upon providing in writing an application for a permit modification and documentation of two (2) years of consecutive monitoring results below applicable groundwater standards. – [15A NCAC 02T .0108]

- 12. For facilities where groundwater monitoring is required, all monitoring wells specified in the COC shall be sampled after construction. The Permittee shall submit a Compliance Monitoring Form (GW-59) and a Well Construction Record Form (GW-1) listing this permit number and the appropriate monitoring well identification number. Initial Compliance Monitoring Forms (GW-59) without copies of the Well Construction Record Forms (GW-1) are deemed incomplete. Well construction forms, and monitoring data shall refer to the farm number or permit number and the well nomenclature as specified in the COC. [15A NCAC 02T .0105(m)]
- 13. For facilities where groundwater monitoring is required, the monitoring wells specified in the COC shall be sampled at the frequencies and for the parameters specified in Attachment B-or as otherwise identified in the COC. All mapping, and monitoring data shall refer to the permit number and the well nomenclature as provided in the COC. [15A NCAC 02T .0105(m)]

14. For facilities where groundwater monitoring is required, all monitoring well sampling and analysis results for wells specified in the COC shall be submitted on a Compliance Monitoring Form (GW-59), along with attached copies of laboratory analyses on or before the last working day of the month following the sampling month. The Compliance Monitoring Form (GW-59) shall include the Certification of Coverage <u>COC</u> or permit number, the appropriate well identification number, and one GW-59a certification form shall be submitted with each set of sampling results. All information shall be submitted to the following address or through electronic reporting system once available:

Division of Water Resources Information Processing Unit 1617 Mail Service Center Raleigh, North Carolina 27699-1617

[15A NCAC 02T .0105(m)]

- 15. A copy of this General Permit, the facility's COC, certification forms, lessee and landowner agreements, the CAWMP and copies of all records, plans, reports, press releases, and public notices 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.
- 16. 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. [15A NCAC 02T.0108(c)]
- 17. 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); 15A NCAC 02B .0506(a)(3)]

- a. Failure of any component of the animal waste management<u>farm digester</u> 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.17.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 <u>mustshall</u> be made with the Division of Emergency Management at **1-800-858-0368**.

The Permittee shall also file a written report<u>POA</u> to the appropriate Division Regional Office within five (5) calendar days following first knowledge of the occurrence. This report <u>POA</u> 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.17.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 .0105(l); 15A NCAC 02B .0506(a)(3)]

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<u>n additional POA</u>-written report to the appropriate Division Regional Office within two (2) calendar days following first knowledge of the occurrence. This <u>report-POA</u> 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)]

18. The Permittee shall submit an annual report to the Division's Central Office by April 1 of each year for the previous calendar year's activities. The report <u>mustshall</u> be filed using the form in Attachment A. These reports will be kept on file at the Department and made available for public review upon request. -[15A] NCAC 02T .0108(b)]

The reports shall be sent electronically to: <u>AnimalAnnualReport@ncdenr.gov</u> OR by mail to:

Animal Feeding Operations Division of Water Resources 1636 Mail Service Center Raleigh, North Carolina 27699-1636

Upon written notification by the Director, the Permittee shall utilize a Division approved electronic reporting tool for the submission of the annual report. Permittees may request in writing a waiver from the electronic reporting requirement. Waiver requests shall justify why the reporting tools cannot be reasonably used by the Permittee and include an estimate of <u>the</u> time the waiver will be needed. Waiver requests shall be submitted a minimum of one (1) month prior to the annual report submittal date. – [15A NCAC 02T .0108(b)]

19. In the event of a discharge of 1,000 gallons or more of animal waste to surface waters or wetlands, the Permittee <u>mustshall</u> 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 <u>mustshall</u> 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 <u>mustshall</u> be <u>maintained consistent with Condition III.15</u>, submitted to the Division within thirty (30) days,kept for at least one (1) year after the discharge and <u>mustshall</u> be distributed to any person upon request. – [G.S. §143-215.10C(h)(1)]

At a minimum the press release shall include the name of the facility, location of the discharge, estimated volume of wastewater entering state waters, time and date discharge occurred, duration of the discharge, and identification of receiving water body. The Permittee shall provide a copy of the press release to the Division. _[15A NCAC 02T .0108(b)]

- 20. 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.19. The public notice mustshall 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–Division 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.19. The Permittee mustshall maintain a copy of the press release and the public notice consistent with Condition III.15. [G.S. §143-215.10C(h)(2)]
- 21. If a discharge of 1,000,000 gallons or more of animal waste reaches surface waters or wetlands, <u>the</u> <u>Permittee shall contact</u> the appropriate Division Regional Office <u>must be contacted</u> to determine in what additional counties, if any, a public notice <u>mustshall</u> be published. <u>A copy of all public notices and proof</u> <u>of publication must be sent to the Division within thirty (30) days after the notice is published.</u>

These requirements are in addition to those found in Conditions III.19 and III.20 above. The Permittee shall file a copy of all notices and proof of publication with the Division within thirty (30) days after the notice is published. The Permittee mustshall maintain a copy of the public notice and proof of publication consistent with Condition III.15. – [15A NCAC 02T.0108(b)]

22. The Permittee shall conduct a survey of the sludge accumulation in all lagoons<u>and digesters</u> every year. The survey report <u>shouldshall</u> 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 <u>lagoonstructure</u>. 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 <u>sludge volume exceeds 50% of the planned treatment volume and/or</u> there is less than a 2.5 feet sludge free zone at the pump intake during irrigation the structure does not satisfy the criteria set by NC NRCS Conservation Practice Standard No. 359, a sludge removal or management plan <u>mustshall</u> be submitted to the <u>appropriate</u> Division <u>Regional Central</u> Office within ninety (90) days of the determination. The plan shall describe <u>sludge</u> removal, <u>and</u> waste <u>management</u>, and waste utilization procedures to be used.

Compliance regarding sludge levels <u>(less than 50% of the planned treatment volume or insufficient depth</u> <u>at pump intake)</u> <u>mustshall</u> be achieved within two (2) years of the determination. <u>The Division may grant</u> <u>extension requests for sludge compliance based on demonstrated lagoon performance</u>. – [15A NCAC 02T .0108(b) and .1304(b)]

23. Upon written notification from the Director, the Permittee shall notify the appropriate Division Regional Office at least seventy-two (72) hours prior to conducting sludge survey. Such notification shall be made during normal office hours from 8:00 a.m. until 5:00 p.m. on Monday through Friday, excluding State Holidays and weekends.

The determination to require notification may be based on the facility's violations, evaluation of required records, or observed sludge levels. This determination shall be made on a case-by-case basis. – [15A NCAC 02T.0108(c)]

23.24. The Permittee shall conduct wastewater sampling and analysis of both the influent and effluent of the digester for the following parameters quarterly. Quarterly tests of representative grab samples pursuant to an approved Sampling Plan shall be conducted once within each of the following windows with at least sixty (60) days between any two sampling events: Quarter 1: Jan-March; Quarter 2: April-June; Quarter 3: July-Sept; Quarter 4: Oct-Dec. Sample results shall be submitted to the Division's Central Office by the end of the month following sampling. Quarterly grab sampling shall begin no later than six months after submission of the Engineer's Certification as required by Condition I.15 and end after eight consecutive quarters of sampling. – [15A NCAC 02T .0108(b)]

Total Nitrogen or Total Kjeldahl Nitrogen	Nitrate Nitrogen (NO ₃ -N/ NO ₂ -N)
Ammonium Nitrogen (NH4-N)	Total Phosphorous
Copper	Zinc
Sulfur	pН

IV. INSPECTIONS AND ENTRY

- 1. The <u>permitted animal feeding operation and farm digester system are Permittee is</u> 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 shall be kept under the conditions of this General Permit;
 - b. Have access to and copy, at reasonable times, any records that <u>mustshall</u> 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. <u>GENERAL CONDITIONS</u>

- 1. Coverage 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 <u>mustshall</u> 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)]

Farms with lagoon and storage pond designs completed after September 1, 1996, storage mustshall also be provided for the heavy rainfall factor (NC NRCS Standard 359) 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 mustshall 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 <u>waste</u> containment basin, such as a digester, lagoon, or 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 NC NRCS 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 <u>mustshall</u> 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)]

The Permittee shall notify the appropriate Division Regional Office at least twenty-four (24) hours in advance of beginning closure of a waste containment basin. Closure shall also include a minimum of 24 hours pre-notification of the DivisionSuch notification shall be made during normal office hours from 8:00 a.m. until 5:00 p.m. on Monday through Friday, excluding State Holidays and weekends. -and sSubmittal of the Animal Waste Storage Pond and Lagoon Closure Report Form to the address identified on the form is required 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 <u>mustshall</u> provide the recipient(s) with information on the nutrient content of the manure. Distribution of greater quantities <u>mustshall</u> 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 <u>mustshall</u> 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 enforcement actions including revocation of <u>its-the</u> 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 <u>its-the</u> 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 mustshall 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. \$143-215.10C]

Any proposed modification to an animal waste management<u>a farm digester</u> 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 <u>mustshall</u> apply for and obtain a new COC. Renewal applications <u>mustshall</u> 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 Groundwater Compliance Boundary is defined 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.
- 12. Upon abandonment or depopulation for a period of five (5) years or more, the Permittee <u>mustshall</u> satisfy all the following criteria prior to restocking the facility:
 - a. The Permittee <u>mustshall</u> 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.

Any facility that does not meet the criteria above is a new swine animal waste management system. – [15A NCAC 02T .1302(5)]

VI. <u>PENALTIES</u>

- 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 <u>mustshall</u> 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. <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 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 applied to soil to meet the nitrogen needs of the crop but does not overload the soil with the nutrients or other constituents that cause or contribute to a contravention of surface water or groundwater standards, limits crop growth, or adversely impact soil quality. Nitrogen 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. Unless otherwise specified, nitrogen shall be rate-determining element. - [G.S. \$143-215.10C(e)(6), 15A NCAC 02T .0103(1) and 15A NCAC 02T .1304(b)]

Amendment to the CAWMP means a minor change and/or addition to a part(s) of the plan and does not require pre-approval from the Division to implement. The following are examples of amendments to the CAWMP:

- In an existing CAWMP, a change in crops and/or cropping pattern that utilizes 25% or less of the N generated is considered a plan amendment. Additional acreage needed to facilitate the change in crops and/or cropping pattern is permissible and considered part of the amendment.
- The addition of winter crops and/or interseeded perennial crops are considered amendments to an existing CAWMP when the operation does not require additional acreage and/or crops for N utilization and does not exceed the 25% criteria stated above.
- Inclusions of emergency action plans, and insect, odor and mortality checklists are considered CAWMP amendments.
- Including additional acreage for land application beyond what is required in the existing CAWMP is considered a plan amendment.

Anaerobic Digester means a component of a waste management system in which biological treatment breaks down animal manure and other organic materials in the absence of oxygen. – [NRCS Standard 366, Anaerobic Digester, September 2018]

Animal feeding operation means a lot or facility (other than an aquatic animal production facility) where the following conditions are met:

- a. 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
- b. 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]

Animal Waste means livestock or poultry excreta or a mixture of excreta with feed, bedding, litter, or other materials from an animal operation. -[G.S. \$143-215.10B(2)]

Certification means technical specialist certification of the CAWMP in accordance with the requirements of 15A NCAC 02T .1304.

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, and treatment works associated with the animal feeding operations. -[15A NCAC 02T.0108(b)]

Farm Digester System means a system, including all <u>associated animal waste management</u> equipment and lagoon covers, by which gases are collected and processed from an animal waste management system for the digestion of animal biomass for use as a renewable energy resource. The collected gases shall be used as a renewable energy resource as quickly as feasible, but within six months of the collection of the gases, and during that period the gase shall be flared rather than vented. A farm digester system shall be considered an agricultural feedlot activity within the meaning of "animal operation" and shall also be considered a part of an "animal waste management system" as those terms are defined in G.S. 143-215.10B. – [G.S. \$143-213(12a)]

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. – [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. -[15A NCAC 02T .0108(b) and .1304(b)]

Planned Treatment Volume means design (minimum) treatment volume plus sludge storage volume. Planned treatment volume does not include temporary storage (manure, wastewater, excess wash water, and precipitation less evaporation), structural freeboard, 25-year, 24-hour storm storage, or "heavy rainfall" factor (where applicable). – *[NC NRCS Standard 359]*

Revision to the CAWMP means a change to an entire CAWMP to meet current applicable standards. 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. – [15A NCAC 02T .0108(b) and .1304(b)]

State Waters means all waters as defined in G.S. §143-212(6).

Surface Waters means all waters as defined in G.S. §143-212 except underground waters. – [15A NCAC 02T .0103(41)]

Waste means animal waste. – [G.S. §143-215.10B(2)]

Waters of the state means any stream, river, brook, swamp, lake, sound, tidal estuary, bay, creek, reservoir, waterway, or other body or accumulation of water, whether surface or underground, public or private, or natural or artificial, that is contained in, flows through, or borders upon any portion of this State, including any portion of the Atlantic Ocean over which the State has jurisdiction. – [G.S. §143-212]

Wetlands are "waters" as defined by G.S. §143-212 and are areas that are inundated or saturated by an accumulation of surface or ground water as defined in 15A NCAC 2B .0202. – [Session Law 2023-63, Section 12 and 15A NCAC 02T .0103(46)]

This General Permit issued the 30th XXth day of June January, 20222024.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Richard E. Rogers, Jr., Director North Carolina Division of Water Resources By Authority of the Environmental Management Commission

Permit Number AWG400000 Attachment A – Annual Report Form Attachment B – Groundwater Monitoring