ROY COOPER Governor ELIZABETH S. BISER Secretary RICHARD E. ROGERS, JR. Director



October 3, 2023

Koopman Dairies, Inc. Koopman Dairies, Inc. (Liberty Dairy) 204 Lloyd Rd Statesville, NC 28625

Subject:

Permit No. NCA176060 Koopman Dairies, Inc. (Liberty Dairy) Cattle Digester Waste Collection, Treatment, Storage and Application System Randolph County

Dear Koopman Dairies, Inc.:

In accordance with your permit application, we are forwarding herewith Permit No. NCA176060, issued to Koopman Dairies, Inc., authorizing the construction and operation of an anaerobic digestion animal waste treatment system to produce renewable energy (Farm Digester System) for Koopman Dairies, Inc. (Liberty Dairy) located in Randolph County.

When fully implemented, the Farm Digester System shall serve as the treatment system for the entire animal waste stream for the facility with an animal capacity of no greater than **5,000 Milk Cows**. All waste application to land shall be as specified in the facility's Certified Animal Waste Management Plan (CAWMP). Any increase in flow or increase in stocked animals above the listed values in this Permit will require a modification to this Permit and shall be completed prior to actual increase in either flow or number of animals.

This Permit is for the Farm Digester System on the Koopman Dairies, Inc. (Liberty Dairy) only and does not cover, biogas treatment, biogas collection or transmission lines, or the pipeline connection. The issuance of this Permit does not excuse the Permittee from the obligation to comply with all applicable laws, rules, standards, and ordinances (local, state, or federal) nor convey any property rights in either real or personal property.

This permit shall be effective from the date of issuance until September 30, 2028 and shall rescind General Permit and Certificate of Coverage Number AWC760060 dated October 1, 2019. You are authorized and required to operate the system in conformity with the conditions and limitations as specified in this Permit, and the facility's CAWMP. Please pay particular attention to the record keeping and monitoring requirements in this permit as well as Conditions I.14-16 and IV.28. Failure to establish an adequate system for collecting and maintaining the required operational information will result in future compliance problems.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing upon written request within thirty (30) days following receipt of this permit. This request must be in the form of a written petition, conforming to Chapter 150B of the North Carolina General Statutes, and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. This permit shall be final and binding unless such demands are made.



If your Waste Utilization Plan (WUP) has been developed based on site-specific information, careful evaluation of future samples is necessary. Should your records show that the current WUP is inaccurate you will need to have a new WUP developed.

Per 15A NCAC 2T. 0103, a compliance boundary is provided for the facility and no new water supply wells shall be constructed within the compliance boundary. Per Natural Resources Conservation Service standards, a 100-ft separation shall be maintained between water supply wells and any lagoon, storage pond, digester, or any wetted area of a spray field.

Please be advised that any violation of the terms and conditions specified in this Permit may result in revocation of this Permit or penalties in accordance with NCGS 143-215.6A through 143-215.6C, the Clean Water Act, and 40 CFR 122.41, including civil penalties, criminal penalties, and injunctive relief.

If you wish to continue the activity permitted under this Permit after the expiration date of this Permit, an application for renewal must be filed at least 180 days prior to expiration.

You are subject to the conditions of this Permit until the closure of all waste treatment and storage structures, including digesters, and the rescission of this Permit. You must submit a letter to the Division of Water Resources (Division) to request rescission of the Permit by providing documentation of closure of all treatment and containment structures.

This Permit is not automatically transferable. A name/ownership change application must be submitted to the Division prior to a name change or change in ownership.

In accordance with Condition III.28 of is Permit, NCA176060, waste application shall cease within twelve (12) hours of the time that the National Weather Service issues a Hurricane Warning, Tropical Storm Warning, or a Flood Watch/Flash Flood Watch associated with a tropical system for the Randolph County. You may find detailed watch/warning information for your county by calling the Raleigh National Weather Service Office which serves Randolph County at **919-326-1042**, or by visiting their website at: www.weather.gov/rah/

This facility is located in a county covered by our Winston-Salem Regional Office. The Winston-Salem Water Quality Regional Operations Section (WQROS) Staff may be reached at (336) 776-9800. If you need additional information concerning this matter, please contact the Animal Feeding Operations Branch staff at (919) 707-9129.

Sincerely,

for Richard E. Rogers, Jr. Director, Division of Water Resources

cc: Randolph County Health Department Randolph County Soil and Water Conservation District Sam Bingham Laserfiche – Permit File No. 760060

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION DEPARTMENT OF ENVIRONMENTAL QUALITY

INDIVIDUAL CATTLE WASTE FARM DIGESTER SYSTEM NPDES PERMIT

In accordance with the provisions General Statutes G.S. §143-215.10C et seq. and Section 402 of the Clean Water Act (Act) and other applicable Laws, Rules, and Regulations, this National Pollutant Discharge Elimination System (NPDES) Permit (Permit) is hereby granted to

Koopman Dairies, Inc

Randolph County

FOR THE

construction and operation of an anaerobic digestion animal waste treatment system to produce renewable energy (Farm Digester System) consisting of a 2,390,000 gallon open top tank anaerobic digester with an ecomembrane gas collection cover, five existing clay lined lagoons, solids separation system, two equalization tanks, and all necessary pipes, pumps, and appurtenances, to serve the 5,000 Milk Cows at Koopman Dairies, Inc. (Liberty Dairy) with no discharge of wastes to the surface waters, in conformity with the project plan, specifications, and other supporting data subsequently filed and approved by the Department of Environmental Quality (Department) and considered a part of this Permit.

All existing lagoon structures shall be properly operated and maintained throughout the construction and operation of the additional components of the Farm Digester System. During construction of the Farm Digester System, the existing animal waste management system may continue to operate subject to the conditions of this Permit.

This Permit is for the Farm Digester System on the Koopman Dairies, Inc. (Liberty Dairy) only and does not cover biogas treatment, biogas collection or transmission lines, or the pipeline connection.

The Division of Water Resources of the Department of Environmental Quality (Division) will make the facility's Certified Animal Waste Management Plan (CAWMP) available for public review for thirty (30) days prior to issuance of coverage under this Permit.

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

The Permittee shall comply with all specified conditions and limitations in this Permit.

References at the end of each condition are for information only but do not constitute permit conditions.

This Permit shall be effective from October 3, 2023 until September 30, 2028.

I. <u>PERFORMANCE STANDARDS</u>

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

NPDES Permit Number NCA176060

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

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

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

- a. discharges from the ditches are controlled by best management practices (BMPs) designed in accordance with NRCS standards;
- b. the BMPs have been submitted to and approved by the Division;
- c. the BMPs were implemented as designed to prevent a discharge to surface waters or wetlands;
- d. the waste was removed immediately from the ditch upon discovery; and
- e. the event was documented and reported in accordance with Condition VI.21. of this Permit. Nothing in this exception shall excuse a discharge to surface waters or wetlands except as may result because of rainfall from a storm event more severe than the 25-year, 24-hour storm. [40 CFR 412 Subpart C and D; 15A NCAC 02T.1305(e)]
- 2. No discharge of waste shall result in a violation of any of the water quality standards established for the receiving waters as per Title 15A, Subchapter 2B, Section .0200 of the North Carolina Administrative Code (NCAC) or for ground water pursuant to Title 15A NCAC Subchapter 2L.
- 3. The Permittee shall develop and maintain a current CAWMP. The facility's CAWMP, any Plan of Action (POA), sludge plan, or monitoring plan required by this Permit are hereby incorporated by reference into this Permit. The CAWMP must be consistent with all applicable laws, rules, ordinances, and standards (federal, state and local) in effect at the time of siting and design and certification of the facility. Any violation of the terms or conditions of the CAWMP, POA, sludge plan, or monitoring plan is a violation of this 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 .1305(b)]
- 4. The Permittee shall assess, on an ongoing basis, the effectiveness of the implementation of the CAWMP. The Permittee shall modify the CAWMP in order to address any changes needed to maintain compliance with this Permit. Any proposed change to the CAWMP requires a formal request to modify this Permit be submitted to the Division's Central Office. The request shall include the proposed version of the CAWMP with changes from the previous version identified. The Division will review the request to determine if the changes are considered a *major modification* or a *minor modification* (see Section VIII. Definitions).

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

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

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

- 5. Any violation of this Permit or the CAWMP shall be considered a violation of this Permit and subject to enforcement actions. A violation of this Permit may result in the Permittee having to take immediate or long-term corrective action(s) as required by the Division or the Environmental Protection Agency (EPA). These actions may include, but are not limited to, modifying the CAWMP; ceasing land application of waste; removing animals from the facility; or reopening and modifying, revoking and reissuing, and/or terminating the Permit. [40 CFR 122.41(a); 15A NCAC 02T.1305(e)]
- 6. Any proposed increase in the certified design capacity or the Steady State Live Weight (SSLW) of animals above that authorized by this Permit will require a modification to the CAWMP and this Permit prior to the actual increase in either waste production or (SSLW) of animals. -[G.S. §143-215.10C, 15A NCAC 02T .0108(b) and .1305(b)(12)]
- 7. A copy of this Permit, certification forms, lessee and landowner agreements, and the CAWMP shall be readily available at the facility (stored at places such as the farm residence, office, outbuildings, etc.) where animal waste management activities are being conducted for the life of this Permit, unless otherwise specified in this Permit (see Condition IV.19). These documents shall be kept in good condition, and records shall be maintained in an orderly fashion. [40 CFR 122.42(e); 15A NCAC 02T.1305(e)]

A copy of the CAWMP (including the site-specific nutrient management plan) shall be maintained on site and made available to the Division upon request. $-[40 \ CFR \ 122.42(e)(2)(ii)]$

- 8. If prior approval is received from the Director, this permitted facility may either add treatment units for the purpose of removing pollutants before land application of waste or add various innovative treatment processes to the systems in order to determine if the innovative treatment process will improve how the waste is treated and/or managed. Prior to any approval, the Permittee must demonstrate to the satisfaction of the Director that the new treatment unit/innovative treatment process will not interfere with the operation of the existing treatment system and that a process is in place to properly manage and track the pollutants removed. [15A NCAC 2T.1308]
- 9. For all new and expanding operations, no collection, treatment, or storage facilities may be constructed in a 100-year flood plain. -[G.S. \$106-803(a)]
- 10. The applicant must demonstrate that the facility can comply with the requirements of state and federal phosphorus-loss standards prior to issuance of this Permit. [40 CFR 122.42(e); 15A NCAC 02T.1305(e)]
- 11. 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 .1305(b)(6)]
 - b. 100 feet from a perennial stream or perennial waterbody or 35 feet from perennial stream or waterbody if permanently vegetated; [40 CFR 412.4(c); 15A NCAC 02T.1305(e)]
 - c. 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.1305(b)(6)]

- 12. 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.1305(b)(1)]
- 13. 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)]
- 14. The Winston-Salem Regional Office shall 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 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. [15A NCAC 02T.0108(b)]
- 15. 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 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.

-[G.S. 143-213(12a)]

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, shall be submitted certifying that the permitted Farm Digester System has been installed in accordance with the submitted design, this Permit, and applicable engineering standards. 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(0)]

17. 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 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>PUBLIC NOTIFICATION</u>

- 1. When the Division determines that an application for permit coverage and CAWMP are complete, the Division will publish the proposal to grant coverage under this Permit, the application for coverage, and the CAWMP for public review and comment for a period of thirty (30) days. [40 CFR 124.10; 15A NCAC 02T.1305(e)]
- 2. Documents for public review will be made available on the Division's website and at the Division's Central Office located at 512 N. Salisbury St, Raleigh, NC 27604. [40 CFR 124.10; 15A NCAC 02T .1305(e)]
- 3. The following items require notification for public review and comment [40 CFR 124.10; 15A NCAC 02T.1305(e)]:

- a. Application for permit coverage, including permit renewal applications.
- b. Requests for major modifications to a Permit, see Condition I.4.
- c. Supplemental sludge removal and application plans, see Condition III.10.
- d. Modifications to the animal waste collection, treatment, and storage system including the digester.

III. OPERATION AND MAINTENANCE REQUIREMENTS

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

In addition to these requirements, farms with lagoon/storage pond designs completed after September 1, 1996 must also provide storage for the heavy rainfall factor. In the case of gravity-fed lagoons/storage ponds in series, a 25-year, 24-hour storm event and/or the heavy rainfall factor storage requirement for the system may be designed into the lowest lagoon/storage ponds to allow sufficient storage to prevent the waste level from rising into the structural freeboard while the storm water is draining into the lowest lagoon in the system. – [15A NCAC 02T.1305(b)(10)]

- 4. A vegetative cover shall be maintained as specified in the facility's CAWMP on all land application fields and buffers in accordance with the CAWMP. No waste shall be applied upon areas not included in the CAWMP or upon areas where the crop is insufficient for nutrient utilization. However, if the CAWMP allows, then waste may be applied up to thirty (30) days prior to planting or breaking dormancy. [15A NCAC 02T.1305(b)]
- 5. Soil pH on all land application fields shall be adjusted according to the recommendation from the Standard Soil Fertility Analysis (see Condition IV.7) to ensure that it is maintained in the optimum range for crop production. -[G.S. §143-215.10C(e)(7); 15A NCAC 02T.1305(b)]
- 6. 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. In no case shall land application rates for any field exceed agronomic rates or the established crop removal rate for phosphorus for fields with a "HIGH" phosphorus-loss assessment rating as established using the Phosphorus Loss Assessment Tool (PLAT) developed by NC State University and NRCS. There shall be no waste application on fields with a "VERY HIGH" phosphorus-loss assessment rating.

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

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

- 11. No material other than animal waste 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 animal mortality, food waste, human waste, septage, pesticides, toxic chemicals and petroleum products. The Permittee shall comply with effluent standards and prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the Permit has not yet been modified to incorporate the requirement. [40 CFR 122.42(e); 15A NCAC 02T .1305(b)]
- 12. Domestic and/or industrial wastewater from showers, toilets, sinks, etc. shall not be discharged into the farm digester animal waste management system. Water from washing machines located in the milking parlors, used exclusively for washing cloths used during milking, and from wash vats required to be connected to the animal waste management system by Grade A Pasteurized Milk Ordinance Part II, Section 7, Item 5r are exempt from this requirement. Wash water from the cleaning of stock trailers will be permissible only for trailers that are owned by the facility and are used to transport animals to and from the facility, as long as the system has been evaluated and approved to accommodate the additional volume. Only those cleaning agents and soaps that are EPA approved, will not harm the cover crop, and will not contravene the groundwater standards listed in 15A NCAC 2L may be utilized in facilities covered by this Permit. Instruction labels are to be followed when using cleaning agents and soaps. *[15A NCAC 02T .1305(b)]*
- 13. 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. As a part of the facility's CAWMP, the Permittee shall develop a mortality management plan that addresses both normal mortality rates and mass mortality scenarios. [40 CFR 122.42(e); 15A NCAC 02T.1305(e)]

Disposal of dead animals must 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 must be approved by the State Veterinarian. Burial is not recommended for disposal of dead animals. Mortality management plans that utilize burial shall include maps showing existing and planned burial locations with setbacks from surface waters, wells, and property lines. Burial is not allowed in the 100-year floodplain. 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 Winston-Salem 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]

14. Unless accounted for in temporary storage volume, all uncontaminated runoff from the surrounding property and buildings shall be diverted away from the waste lagoons/storage ponds to prevent any unnecessary addition to the liquid volume in the structures. Runoff from lounging areas to the lagoons/waste storage ponds shall be prevented, unless it has been approved in the CAWMP. – [15A NCAC 02T.1305(b)]

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)]

- 15. A protective vegetative cover shall be established and maintained on all earthen lagoon/storage pond embankments (outside toe of embankment to maximum pumping elevation), berms, pipe runs, and diversions to surface waters or wetlands. Trees, shrubs, and other woody vegetation shall not be allowed to grow on the lagoon/storage pond embankments. All trees shall be removed in accordance with good engineering practices. Lagoon/storage pond areas shall be accessible, and vegetation shall be mowed regularly. [15A NCAC 02T.1305(b)]
- 16. Lagoons/storage ponds shall be kept free of foreign debris including, but not limited to, tires, bottles, light bulbs, gloves, syringes, or any other solid waste. [15A NCAC 02T .0108(b)(1)]

- 17. The facility shall have at least one of the following items at all times:
 - a. adequate operable animal waste application and handling equipment;
 - b. a lease, or other written agreement, for the use of the necessary equipment; or
 - c. a contract with a third-party applicator capable of providing adequate waste application.

[15A NCAC 02T .1305(b)]

- 18. The Permittee shall designate a certified Type B Animal Waste Management System Operator with a valid certification to be the Operator in Charge (OIC) for the animal waste management system. The animal waste management system shall be operated by the OIC, a designated back-up OIC, or a person under the OIC's supervision. -[G.S. §90A-47]
- 19. The OIC, a designated Back-up OIC of a Type B 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 applied to land in accordance with the CAWMP. In no case shall the time between inspections be more than one hundred twenty (120) minutes during the application of waste. A record of each inspection shall be recorded on forms supplied by, or approved by, the Division and shall include the date, time, sprayfield number, and name of the operator for each inspection. If neither the OIC nor the 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.

Inspections shall include but not be limited to visual observation of application equipment, spray fields, subsurface drain outlets, ditches, and drainage ways for any discharge of waste. – [15A NCAC 08F .0203(c)(2)]

- 20. 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 Back-up 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 irrigation activities will be stopped immediately. This commitment shall be submitted in writing to the Division on a form supplied by, or approved by, the Division. -[G.S. §90A-47]

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. $-[40 \ CFR \ 122.41(e); \ 15A \ NCAC \ 02T \ .0108(b)]$

- 21. 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 shall 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)]
- 22. Bypass of a treatment unit within the animal waste management system is prohibited. [40 CFR 122.41 (m); 15A NCAC 02T.1305(e)]
- 23. No waste shall be applied in wind conditions that 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)(1)]

- 24. 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 due to wind drift. This determination shall be made on a case-by-case basis. [15A NCAC 02T.1305(b)]
- 25. The Permittee shall maintain buffer strips or other equivalent practices as specified in the facility's CAWMP near feedlots, manure storage areas, and land application areas. [40 CFR 122.42(e); 15A NCAC 02T.1305(e)]
- 26. Waste shall be applied using the following minimum setbacks from surface water or wetlands or any conduit to surface water or wetlands:
 - a. 100-foot setback with no vegetated buffer
 - b. 35-foot setback with a vegetated buffer; or
 - c. an alternative practice that has been submitted to and approved by the Division that would provide equivalent pollutant reductions to the 100-foot setback.

[40 CFR 412.4(c); 15A NCAC 02T .1305(e)]

- 27. Waste shall not be applied on land that is flooded, saturated with water, frozen, or snow covered at the time of land application. [15A NCAC 02T.1305 (b)(7)]
- 28. Land application of waste is prohibited during precipitation events. The Permittee shall consider pending weather conditions in making the decision to land apply waste. Weather conditions at the time of land application and for twenty-four (24) hours prior to and following application shall be documented on forms supplied by, or approved by, the Division. [15A NCAC 02T.0108 (b)(1) and 15A NCAC 02T.1305(b)(8)]

Land application of waste shall cease within twelve (12) hours of the time that the National Weather Service issues a Hurricane Warning, Tropical Storm Warning, or a Flood Watch/Flash Flood Watch in advance of a tropical system including a hurricane, tropical storm, or tropical depression for the Randolph County or specific area 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 for Randolph County are posted on the National Weather Service's website located at: <u>www.weather.gov/rah/</u>. Watch and warning information can also be obtained by calling the Raleigh National Weather Service Office which serves Randolph County at **919-326-1042**. – [15A NCAC 02T.0108 (b)(1)]

- 29. 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); 15A NCAC 02T.1305(b)]
- 30. All waste application equipment must be tested and calibrated at least once per year. The results must be documented on forms provided by, or approved by, the Division. [15A NCAC 02T .1305(b)]
- 31. Crops to which animal waste is applied shall 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. Harvested crops shall not be allowed to become unusable due to prolonged exposure to the weather. [15A NCAC 02T .0108 (b)(1)]
- 32. Any major structural repairs to lagoons/storage ponds must have written documentation certifying proper design and installation. Professional Engineers, authorized federal employees, and or designated technical specialist 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 technical specialist

approval is necessary [i.e. piping, reels, valves, pumps (if the gallons per minute (gpm) capacity is not being increased or decreased), etc.] unless the replacement involves disturbing the lagoon/storage pond embankment. -[15A NCAC 02T .0108 (b)(1)]

- 33. For waste treatment lagoons, the operator may temporarily lower lagoon waste 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 shall be satisfied prior to lowering lagoon waste 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 shall 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 .1305(b)]

- 34. Animals confined at the Facility shall not be allowed to come into direct contact with waters of the State. Fences may be used to restrict such access. [40 CFR 122.42(e); 15A NCAC 02T.1305(e)]
- 35. Site-specific conservation practices necessary to prevent runoff of pollutants to waters of the State (such as no-till cropping to meet PLAT requirements) shall be identified in the CAWMP. These practices shall be implemented and maintained as part of the Permit. [40 CFR 122.42(e); 15A NCAC 02T .1305(e)]

IV. MONITORING AND REPORTING REQUIREMENTS

- 1. An inspection of the farm digester animal waste collection, treatment, and storage structures, and runoff control measures shall be conducted and documented at a frequency to insure proper operation but at least monthly and after all storm events of greater than one (1) inch in twenty-four (24) hours. For example, lagoons/storage ponds, and other structures should be inspected for evidence of erosion, leakage, damage by animals, or discharge. Inspections shall also include visual observation of subsurface drain outlets, ditches, and drainage ways for any discharge of waste. [15A NCAC 02T.0108 (b)(1)]
- 2. Monitoring and Recording Freeboard Levels
 - a. Highly visible waste-level gauges shall be maintained to mark the level of waste in each lagoon/storage pond that does not gravity feed through a free flowing transfer pipe into a subsequent structure. The

gauge shall have readily visible permanent markings. A sketch of each waste-level gauge shall be included in the facility's records. The sketch shall include, at a minimum, markings for the top of temporary storage and top of permanent storage with labels indicating the corresponding depths in inches. $-[40 \ CFR \ 412.37; 15A \ NCAC \ 02T \ .1305(e)]$

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

Upon written notification from the Director, more frequent monitoring and recording on 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 shall 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 shall 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. 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) shall be installed on all treatment and storage structures covered by this Permit to measure and record freeboard. This equipment shall be properly maintained and calibrated in a manner consistent with manufacturer's operation and maintenance recommendations. This automated equipment shall 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 Winston-Salem 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 Permit or the facility's CAWMP. [15A NCAC 02T.0108(c)]
- 3. Monitoring and Recording Precipitation Events
 - a. A rain gauge shall 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 shall be recorded for all precipitation events and maintained on site for review by the Department. Daily records do not need to be maintained for those days without precipitation events. -[15A NCAC 02T .0108(c)]
 - a. 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 shall be properly maintained

and calibrated in a manner consistent with manufacturer's operation and maintenance recommendations. This automated equipment shall 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 Winston-Salem 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. Monitoring and Recording Land Application Events
 - a. The Permittee shall record all wastewater irrigation and land application events, including hydraulic loading rates, nutrient loading rates (nitrogen and phosphorus), cropping information, and weather conditions. The OIC will also provide a record of the continuous or 120-minute inspections of the application area during each land application event. [40 CFR 412.37; 15A NCAC 02T.1305(e)]
 - b. Upon written notification from the Director, the Permittee shall install and operate flow meters with flow totalizers. Written notification may be provided based on the facility's violations and/or incomplete or incorrect record keeping during land application events. This determination shall be made on a case-by-case basis. -[15A NCAC 02T .0108(b)(1)]
- 5. An inspection of all water lines, including drinking water and cooling water lines, shall be conducted and documented daily. [40 CFR 412.37; 15A NCAC 02T .1305(e)]
- 6. All corrective actions taken as a result of inspection activity shall be documented. [40 CFR 412.37; 15A NCAC 02T .1305 (e)]
- 7. A representative Standard Soil Fertility Analysis, including pH, phosphorus, copper, and zinc, shall be conducted at least once every three years on each application field receiving animal waste. -[G.S. §143-215.10C(e)(6)]
- 8. The Permittee shall perform a phosphorus-loss evaluation using the NC Phosphorus Loss Assessment Tool (PLAT) prior to submitting an application for renewal of this Permit in accordance with state and federal requirements. This evaluation shall be documented on forms supplied by or approved by the Division and shall be submitted to the Division. Upon completion of the phosphorous-loss evaluation, the CAWMP shall be updated to include the current risk assessment rating, and submitted to the Division upon application for renewal of this Permit. Per NC NRCS Standard 590, PLAT results are valid for five (5) years. [G.S. §143-215.10C(e); 15A NCAC 02T.1305(b)(1)]

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]

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

Nitrogen Zinc Phosphorus Copper

10. The Permittee shall maintain records of the removal of any manure, litter, or process wastewater from the Facility; these records shall include the date of transfer, recipient name and address, and approximate amount of manure or process wastewater transferred. Transfer of manure, litter, or process wastewater shall 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)]

Prior to transferring manure, litter, or process wastewater to other persons, the Permittee shall provide the recipient a copy of the most current nutrient analysis as described in Condition IV.9. The Permittee must inform the recipient(s) of the responsibility of properly managing the land application at no greater than agronomic rates. $-[40 \ CFR \ 122.42(e)(3); \ 15A \ NCAC \ 02T \ .1305(e)]$

11. The Permittee shall conduct an annual survey of the sludge accumulation in all digesters, lagoons and storage ponds. The survey report should be written on forms provided or approved by the Division and shall include a sketch showing the depth of the sludge in the various locations within each lagoon. This survey shall be submitted as part of the facility's annual report in the year it was conducted; see Condition IV.18. Survey frequency may be reduced if it can be demonstrated to the satisfaction of the Division that the rate of sludge accumulation does not warrant an annual survey.

If the sludge accumulation is such sludge volume exceeds 50% of the planned treatment volume and/or there is less than a 2.5 feet sludge free zone at the pump intake during irrigation, a sludge removal or management plan shall be submitted to the Division Central Office within ninety (90) days of the determination. The plan shall describe sludge removal, waste management, and waste utilization procedures to be used.

Compliance regarding sludge levels (less than 50% of the planned treatment volume or insufficient depth at pump intake) shall be achieved within two (2) years of the determination. The Division may grant extension requests for sludge compliance based on demonstrated lagoon performance – [15A NCAC 02T .1305(b)]

- 12. The Permittee shall maintain stocking records for the facility at least weekly so as to demonstrate and report the annual average number of animals. [40 CFR 122.42(e); 15A NCAC 02T .1305(e)]
- 13. The Permittee shall maintain mortality management records, including dates, numbers, disposal methods, and burial locations (if applicable). [40 CFR 412.37; 15A NCAC 02T .1305(e)]
- 14. A record shall be created and maintained of all transfers of waste between lagoons/storage ponds not typically operated in series. At a minimum, such record shall include the identity of the lagoon/storage pond from which the waste was transferred, the identity of the lagoon/storage pond receiving the waste, the date and time of transfer, and the total volume of waste transferred. -[15A NCAC 02T .0108(b)(1)]
- 15. If, for any reason, there is a discharge from any component of the farm digester animal waste management system (including discharges from the land application sites) to surface waters or wetlands, the Permittee is required to make notification to the Winston-Salem Regional Office in accordance with Condition IV.20, unless otherwise noted. The Permittee will be responsible for notifying the Division with the following information [40 CFR 122.41 (l); 15A NCAC 02T .1305 (e)]:
 - a. Description of the discharge: A description of the discharge including an estimate of the volume discharged, a description of the flow path to the receiving surface waters or wetlands and a site sketch showing the path of the waste.
 - b. Time of the discharge: The length of time of the discharge, including the exact dates and times that it started and stopped, and if not stopped, the anticipated time the discharge is expected to continue.

- c. Cause of the discharge: A detailed statement of the cause of the discharge. If caused by a precipitation event, detailed information from the on-site rain gauge concerning the inches and duration of the precipitation event.
- d. All steps being taken to reduce, stop and cleanup the discharge. All steps to be taken to prevent future discharges from the same cause.
- e. Analysis of the waste: A copy of the last waste analysis conducted as required by Condition IV. 9 above.
- 16. All monitoring shall be conducted according to test procedures approved in accordance with 40 CFR Part 136, unless other test procedures have been specified in this Permit or approved by the Director.
- 17. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. [40 CFR 122.41(j); 15A NCAC 02T .1305(e)]
- 18. An annual certification report shall be filed with the Division's Central Office by March 1 of each year for the previous calendar year's activities. If the facility was not in compliance, the annual report shall be used to summarize all noncompliance during the previous year, actions taken or actions proposed to be taken to resolve noncompliance, and current compliance status of the facility. In addition, the annual report shall certify that all records required by this Permit are available for review during the annual inspection performed by the Division. The annual report shall be completed on a form provided by or approved by the Division. This annual report requirement will continue for the duration of this permit cycle. [40 CFR 122.42(e); 15A NCAC 02T .1305 (e)]

The EPA Electronic Reporting Rule (Docket ID No. EPA-HQ-OECA-2009-0274) requires all regulated entities to electronically report data required by the NPDES permit program instead of filing written paper reports. <u>No later than December 21, 2025</u>, the Permittee shall begin electronic submission of all annual report elements listed below directly to EPA. (Annual report date will continue to have March 1 submission deadline.)

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

The Permittee may seek a temporary electronic reporting waiver by submitting a request to the Division at least 180 days prior to the report filing deadline. The waiver request must contain the following details:

- a. Facility name;
- b. Permit number;

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

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

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

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

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

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

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

- f. Failure to maintain waste level in a lagoon/storage pond below that of the designed structural freeboard. Note that this notification is in addition to the report required by Condition IV.20.e above.
- g. An application of waste either in excess of the limits set out in the CAWMP or where runoff enters surface waters or wetlands.
- h. Any discharge to surface waters or wetlands and/or that poses a serious threat to the environment.

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

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

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

- 21. The Director may require facilities to submit additional reports and/or certifications based on the facility's compliance history. [15A NCAC 02T.0108(c)]
- 22. In the event of a discharge of 1,000 gallons or more of animal waste to surface waters or wetlands, the Permittee shall 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 shall 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 shall be maintained consistent with Condition III.19, submitted to the Division within thirty (30) days, and shall 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. - [15A NCAC 02T .0108(b)]

23. In the event of a discharge of fifteen thousand (15,000) gallons or more of animal waste to surface waters or wetlands, a public notice is required in addition to the press release described in Condition IV.22. The public notice of the discharge shall be placed in a newspaper having general circulation in the county in which the discharge occurred and in each county downstream from the point of discharge that is significantly affected by the discharge. The Division shall determine, at the Director's sole discretion, which counties are significantly affected by the discharge and shall approve the form and content of the notice and the newspapers in which the notice is to be published. The notice shall be captioned "NOTICE OF DISCHARGE OF ANIMAL WASTE". The minimum content of the notice is the location of the discharge, estimated volume, identification of the surface water or wetland affected, steps taken to prevent future discharges, and a phone number and contact name.

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

24. If a discharge of one million (1,000,000) gallons of animal waste or more reaches surface waters or wetlands, the Winston-Salem Regional Office must be contacted to determine in what additional counties, if any, a public notice shall be published.

These requirements are in addition to those found in Conditions IV.22 and IV.23. 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 shall maintain a copy of the public notice and proof of publication consistent with Condition III.19. -[G.S. §143-215.10C(h)]

- 25. The Division may require any additional monitoring and reporting (including but not limited to groundwater, surface water or wetland, waste, sludge, soil, lagoon/storage pond levels and plant tissue) necessary to determine the source, quantity, quality, and effect of such waste upon surface waters, groundwaters or wetlands. Such monitoring, including its scope, frequency, duration, and any sampling, testing, and reporting systems, shall meet all applicable Environmental Management Commission and EPA requirements. [15A NCAC 02T .0108(c)]
- 26. All monitoring, record keeping, and reporting required by this Permit and any additional monitoring and reporting required by the Director shall be on forms supplied by or approved by the Director. Submittal of these reports shall be in paper and/or electronic format as required by the Director. [40 CFR 122.41(l); 15A NCAC 02T .1305(e)]
- 27. Within five (5) working days of receiving the request from the Division, the Permittee shall provide to the Division one (1) copy of all requested information and reports related to the operation of the animal waste management system. Once received by the Division, all such information and reports become public information, unless they constitute confidential information under state and federal law, and shall be made available to the public by the Division as specified in law. [15A NCAC 02T.0108(c)]
- 28. 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.13 and end after eight consecutive quarters of sampling. [15A NCAC 02T.0108(b)]

Total Nitrogen or Total Kjeldahl Nitrogen	
Ammonium Nitrogen (NH ₄ -N)	
Copper	
Sulfur	

Nitrate Nitrogen (NO₃-N/ NO₂-N) Total Phosphorous Zinc pH

V. <u>INSPECTIONS AND ENTRY</u>

- 1. The permitted animal feeding operation and farm digester system are subject to inspections at anytime, without announcement, by any authorized representative of the Department or EPA, upon the presentation of credentials and other documents as may be required by law and in accordance with reasonable and appropriate biosecurity measures, to: $-[40 \ CFR \ 122.41(i); \ 15A \ NCAC \ 02T \ .1305(e)]$
 - a. Enter the Permittee's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this Permit;

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

VI. <u>GENERAL CONDITIONS</u>

- 1. In accordance with the provisions of 40 CFR Part 122.41 et seq., this Permit incorporates by reference all conditions and requirements applicable to NPDES permits set forth in the Act, as amended, as well as all applicable regulations.
- 2. The issuance of this Permit shall not relieve the Permittee of the responsibility for compliance with all applicable surface water, wetlands, groundwater and air quality standards or for damages to surface waters, wetlands, or groundwaters resulting from the animal waste management system. [15A NCAC 02T .0113(b)]
- 3. Any waste containment basin, such as a lagoon or a storage pond, used for waste management shall continue to be subject to the conditions and requirements of this Permit until properly closed. When the containment basin is properly closed in accordance with the NRCS Conservation Practice Standard No. 360 "Waste Facility Closure," April 2012, or any subsequent amendment, the containment basin shall not be subject to the requirements of this Permit or the Act. The Permittee is required to submit a letter to the Division to request rescission of the Permit by providing documentation describing the procedures taken to close any containment basin. The Permittee shall notify the Winston-Salem Regional Office at least twenty-four (24) hours in advance of beginning closure of a waste containment basin. 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. Submittal 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.0105(j)]
- 4. The Permittee may only transfer animal waste to individuals or businesses permitted to manage, treat, and distribute the waste, or to be land applied to sites identified in the Permittee's CAWMP. The Permittee shall provide the recipient(s) with information on the nutrient content of the animal waste. The Permittee shall inform the recipient(s) of his/her responsibilities to properly manage the land application of manure. The Permittee shall maintain a record of all animal waste transfers including the date, volume, and receiving individual or business. [15A NCAC 02T .0108(b) and .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 this Permit. -[15A NCAC 02T .0105(e)]
- 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 this Permit. [15A NCAC 02T .0110]
- 7. This Permit is not transferable. In the event there is a desire for the facility to change ownership, or there is a name change of the Permittee, a formal permit request shall be submitted to the Division, including documentation from the parties involved and other supporting materials as may be appropriate. This request will be considered on its merits and may or may not be approved. [40 CFR 122.41(l); 15A NCAC 02T .1305(e)]

- 8. This Permit is effective only with respect to the nature and volume of wastes described in the application and other supporting data. The Permittee shall notify the Division immediately of any applicable information not provided in the permit application. -[G.S. §143-215.10C]
- 9. Any proposed modification to an animal waste management system shall require approval from the Division prior to construction. -[G.S. §143-215.10C]
- 10. If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee shall apply for and obtain a new Permit. Renewal applications must be filed at least one hundred eighty (180) days prior to the expiration of the Permit. [15A NCAC 2T.0109]
- 11. The issuance of this Permit does not prohibit the Division from reopening and modifying the Permit, revoking and reissuing the Permit, or terminating the Permit as allowed by the laws, rules, and regulations contained in 40 CFR Parts 122 and 123; Title 15A of the NCAC, Subchapter 02T .1300; and G.S. §143-215.1 and G.S. §215.10C. The filing of a request for a permit modification, revocation and reissuance, or termination; for a notification of planned changes; or for an anticipated noncompliance does not stay any Permit Condition. [15A NCAC 2T .0110]
- 11. The issuance of this Permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State/Tribal, or local laws or regulations. [40 CFR 122.41(g); 15A NCAC 02T .1305(e)]
- 12. The Director may require any person, otherwise eligible for coverage under this Permit, to apply for an individual NPDES permit by notifying that person that an application is required. Coverage by this Permit shall automatically terminate upon issuance of a NPDES individual permit. [40 CFR 122.28(b)(3); 15A NCAC 2T .0111(h); 15A NCAC 02T .1305(e)]
- 13. The <u>COMPLIANCE BOUNDARY</u> for the disposal system is specified by regulations in 15A NCAC 2L, Groundwater Classifications Standards. The Compliance Boundary for a disposal system individually permitted on or after December 31, 1983, is established at either two hundred fifty (250) feet from the waste disposal area, or fifty (50) feet within the property boundary, whichever is closest to the waste disposal area. The exceeding of Groundwater Quality Standards at or beyond the Compliance Boundary is subject to immediate review action according to 15A NCAC 2L .0106(d)(2).

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

- 14. Upon abandonment or depopulation for a period of five (5) years or more, the Permittee shall satisfy all the following criteria prior to restocking the facility
 - a. The Permittee shall 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 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 cattle animal waste management system. -[15A NCAC 02T.1302(5)]

VII. <u>PENALTIES</u>

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

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

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

VIII. <u>DEFINITIONS</u>

25-year, 24-hour rainfall or storm event means the maximum 24-hour precipitation event with a probable recurrence interval of once in twenty-five (25) years, as defined by the National 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]

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

Agronomic 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.1305(b)]

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:

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

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)]

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

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

Certification means technical specialist certification of the CAWMP in accordance with the requirements of 15A NCAC 02T .1305.

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

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 surface waters. – [15A NCAC 02T.0108(b)]

Division means the North Carolina Division of Water Resources.

Excessive Ponding means any area of the application field where visible liquid waste is ponded on the surface of the land application site more than four (4) hours following the application of waste. Excessive ponding also means any areas where the ponding of waste has resulted in crop failure. -[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 animal waste management equipment and lagoon covers, by which gases are collected and processed from an animal waste management system for the digestion of animal

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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 gas 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 means the application of animal waste onto or incorporation into the soil. - [15A NCAC 02T.0108(b)]

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

Major modification means a modification including a change in the number of animals above that are authorized by this Permit; a change in type of operation; retrofit of a lagoon (including the installation of a cover); installation of a new irrigation system; any changes to field specific land application rates; the addition of new land area for waste application; a reduction in land application area; or changes in crops and/or cropping patterns, including addition of fields for sludge application. – [15A NCAC 02T .0108(b)]

Minor modification means a modification which is not a major modification. – [15A NCAC 02T .0108(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]

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

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

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)]

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

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 15A NCAC 2B .0202. – [Session Law 2023-63, Section 12 and 15A NCAC 02T .0103(46)]

This Permit issued the 3rd day of October, 2023.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

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

NPDES Permit Number NCA176060

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