

Delaware Department of Natural Resources and Environmental Control  
Division of Water Resources  
Surface Water Discharges Section  
Title 7 Delaware Administrative Code  
7201 Regulations Governing the Control of Water Pollution, Section 9.5  
Title 7 Delaware Code, Chapter 60

Delaware Department of Agriculture  
Nutrient Management Program  
Title 3 Delaware Code, Chapter 22

## **7201 Regulations Governing the Control of Water Pollution, Section 9.5**

### **PREAMBLE**

These regulations have been developed pursuant to 3 **Del. C.** §2201-2290 and 7 **Del. C.** §6000 et.al. and under DNREC's delegated authority. These statutory and regulatory authorities establish the requirement that a National Pollutant Discharge Elimination System (NPDES) permitting program for Concentrated Animal Feeding Operations (CAFOs) be implemented. These regulations will function as the baseline CAFO standards for compliance of NPDES CAFO permits applicable to certain farms. The Delaware Department of Agriculture (DDA) will manage these regulations in conjunction with DNREC. In general, NPDES CAFO permits, as provided in these regulations, are effective for five years. These regulations were developed by the Delaware Nutrient Management Commission, the Delaware Department of Agriculture and the Delaware Department of Natural Resources and Environmental Control. They are adopted with the guidance, advice and consent of the Delaware Nutrient Management Commission.

### **1.0 Authority, Purpose and Scope**

1.1 **Authority.** These regulations are promulgated pursuant to the authority provided by 3 **Del. C.** §2200 et.al. and 7 **Del. C.** §6000 et.al, and 40 CFR 122 and 412.

1.2 **Purpose.** The purpose of these regulations is to establish requirements for certain animal feeding operations defined as a Concentrated Animal Feeding Operation (CAFO) in order to protect water quality from activities associated with CAFO management, to sustain and provide a profitable agricultural industry and to help meet or exceed federally mandated water quality standards.

1.3 **Scope.** CAFOs, as defined in §2.0 or as designated in §3.2 of these regulations are point sources subject to NPDES CAFO permitting requirements. Once an animal feeding operation (AFO) is defined as a CAFO for one type of animal, the NPDES requirements for CAFOs apply to all animals as referenced in these regulations that are held in confinement at the operation and all manure, litter and process wastewater generated by those animals or the production of those animals.

### **2.0 Definitions**

2.1 For purposes of these regulations, the following words or terms shall have the meanings as indicated:

**“Adequate Storage”** for liquid and solid manure systems, means the provision of at least four months holding capacity of liquid or solid manure in accordance with State Technical Standards.

**“Agricultural Storm Water Exemption”** means a precipitation related exempt discharge of manure, litter or process wastewater. The discharge is exempt provided the manure, litter or process wastewater has been applied in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure or process wastewater, which minimize nitrogen and phosphorus movement to surface waters. The agricultural storm water exemption does not apply to discharges from the production area.

**“Animal Feeding Operation”** or **“AFO”** means a facility (other than an aquatic animal production facility) where the following conditions are met: (1) Animals (other than aquatic) as referenced in §3.1.1 and §3.1.2 of these regulations that have been, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period; and (2) the animal confinement areas do not sustain crops, vegetation, forage growth or post-harvest residues in the normal growing season. (3) Two or more AFOs under common ownership are considered to be a

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single AFO for the purposes of determining the number of animals in an operation, if the production areas adjoin each other or if the AFOs use a common area or system for the disposal of wastes. (For example, facilities or production areas that are commonly managed, co-located and share manure storage systems are considered a single AFO. A poultry operation with many facilities in a single location or address is deemed a single AFO).

**“Animal Waste Management Plan”** means a plan written in accordance with State Technical Standards that documents and recommends a combination of conservation practices and management measures for the handling, storage, treatment and management of any or all of the following for use in connection with animal wastes, manures, composted dead animals, or process wastewater from any animal feeding operation.

**“Applicant”** means any person seeking and or required to obtain a CAFO NPDES permit.

**“Apply,” “applying,”** or any variation of the word “apply,” as it relates to the application of nutrients, means the human controlled mechanical conveyance of nutrients to land for the purpose of applying organic or inorganic nutrients.

**“Application Area”** means land under the control of an AFO owner or operator, whether it is owned, licensed, or leased to which manure, litter or process wastewater from the production area is or may be applied.

**“Best Available Technology Economically Achievable (BAT)”** means those factors involved in assessing the implementation of the best available technology including cost to achieve required effluent reductions, the age of equipment or technology being implemented, process involved, process changes, engineering aspects of the application of various types of control techniques, non-water quality environmental impact, and other such factors as deemed appropriate by the Secretary and in accordance with State Technical Standards.

**“Best Conventional Pollutant Control Technology (BCT)”** means those factors related to the assessment of best conventional pollutant control technology including consideration of the reasonableness of the relationship between costs of attaining a reduction in effluents and the effluent reduction benefits derived, and the comparison of the cost and level of reduction of such pollutants from the discharges, process employed, process changes, engineering aspects of the application of various types of control techniques, non-water quality environmental impact and other such factors as deemed appropriated by the Secretary and in accordance with State Technical Standards.

**“Best Management Practices”** or **“BMP”** means those practices that have been approved by the Delaware Nutrient Management Commission and meet State Technical Standards. Best Management Practices (BMPs) are recommended activities which enhance agronomic results, benefit the environment, and prevent or reduce pollution to Waters of the State. BMPs are not to be interpreted as mandatory implementation actions of a plan (e.g., Pre-side dress Soil Nitrate Test, cover crops, vegetative buffer strips, litter additives, manure incorporation, timing/method, etc.) unless specified in the nutrient management plan, animal waste management plan, or site-specific practices described in §5.0.

**“Best Practicable Control Technology Currently Available (BPT)”** means those factors relating to the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application, age of equipment and facilities, processes, process changes, engineering aspects of the application of various types of control techniques, non-water quality environmental impacts, and other such factors deemed appropriate by the Secretary and in accordance with State Technical Standards.

**“Catastrophic Mortalities”** means any mortality that exceeds the designed disposal system capacity, as described in State Technical Standards, to accommodate losses within 24 hours. Most disposal systems are designed to handle the normal anticipated mortality. If enough animals are lost and the disposal system cannot hold them all without causing serious disruption in the disposal process, then it is a catastrophic loss.

**“Certified Nutrient Consultant”** means a person who is approved by the Delaware Nutrient Management Commission to engage in the activities of advising or consulting with another person who is required to have a certificate under the *Delaware Nutrient Management*

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*Regulations*, regarding the formulation, application, or scheduling of organic or inorganic nutrients within Delaware. Provided however any employee of any federal, State or local government agency or the University of Delaware, or other organization duly recognized by the Commission for such purpose, who provides advice or consultation in his capacity as such an employee, without compensation, shall not be deemed to be a nutrient consultant unless such advice and consultation constitutes a direct and substantial part of a nutrient management plan developed pursuant to these regulations.

**“Concentrated Animal Feeding Operation”** or **“CAFO”** means an animal feeding operation (AFO) subject to the terms and conditions of these regulations and defined as a “Large CAFO”, or a “Medium CAFO”, or “Designated” as a CAFO in accordance with §3.2 of these regulations.

**“Delaware Nutrient Management Commission,” “DNMC”,** or **“Commission”** means the Commission established by 3 Del. C. §2220 “or its designee.”

**“Department”** means the Delaware Department of Natural Resources and Environmental Control who shall administer the program with the assistance of the Delaware Department of Agriculture.

**“Discharge of a Pollutant”** or **“discharge”** means the addition of any pollutant or combination of pollutants, to state waters or the ocean, from any source or activity other than a vessel or other floating craft when being used as a means of transportation and in compliance with the Clean Water Act. This definition includes, but is not limited to additions of pollutants into State waters from: (1) Surface runoff that is collected or channeled by man; (2) Discharges through pipes, sewers, and other conveyances which do not lead to a treatment works; and (3) Discharges through pipes, sewers, or other conveyances, leading into a treatment works other than a publicly owned treatment works (POTW).

**“Drainage Ditch”** means a constructed or reconstructed watercourse with a drainage area less than 800 acres. A constructed or reconstructed watercourse with a drainage area greater than 800 acres is considered a stream.

**“Effluent Limitation”** means any restrictions, prohibitions, or permit requirements established under State or Federal law, including but not limited to, standards of performance for new sources, best management practices or BMPs, effluent standards and ocean discharge criteria on the quantities, rates, and concentrations of the chemical, physical, biological, or other constituents discharged into state waters.

**“Freeboard Action Level”** means the liquid level within a lagoon or other liquid storage structure that indicates the structure is full and requires that immediate steps be taken to transfer liquid out of the waste storage structure.

**“Ground Water”** means any water naturally found under the surface of the earth.

**“Inorganic Fertilizer(s)”** means a fertilizer comprised of chemically synthesized plant nutrient elements that are essential for plant growth and include at least nitrogen or phosphorus.

**“Land Application Area”** is equivalent to “Application Area”.

**“Linear Rate”** means an approach that expresses rates of application of nutrients as pounds of nitrogen and phosphorus, as described in State Technical Standards.

**“Liquid Manure”** means less than 12% solids. Wash water, runoff, precipitation, and so forth are added, if needed to dilute the manure and lower the solids content.

**“Manure”** means fecal and urinary defecations of animals as referenced in §3.1.1 and §3.12, and may include, but is not limited to commingled spilled feed, bedding, soil, and compost.

**“Manure and processed wastewater application setbacks”** means the distance between the land application area and any down-gradient surface waters.

**“Maximum Operating Level”** means the maximum operating level for liquid waste storage ponds and shall be the pond level that provides for the required volume less the volume contribution of precipitation and runoff from the 25-year, 24-hour storm event plus the volume allowance for residual solids after liquids have been removed.

**“Narrative Rate”** means an approach that expresses rates of application as a narrative rate of application that results in the amount, in tons or gallons, of manure, litter, and process wastewater to be land applied, as described in the State Technical Standards.

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**"New Discharger"** means any building, structure, facility or installation:

- Which prior to August 13, 1979, had not discharged pollutants;
- Which had never received a final effective NPDES permit for discharges at that site;
- From which there is or may be a new or additional discharge of pollutants; and
- Which does not fall within the definition of "new source".

**"New Source"** means any building, structure, facility or installation from which there is or may be a discharge of pollutants, the construction of which commences:

- After promulgation of standards of performance under §306 of the Act which are applicable to such source; or
- After proposal of standards of performance under §306 of the Act which are applicable to such source, but only if the standards are promulgated within 120 days of their proposal.

In addition, any building, structure, facility or installation constructed after the effective date of these regulations must also meet the criteria described in §7.0 of these regulations.

**"NPDES"** or **"National Pollutant Discharge Elimination System"** means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits for the discharge of any pollutant or combination of pollutants and imposing and enforcing pretreatment and sludge requirements pursuant to the Clean Water Act.

**"Notice of Intent"** or **"NOI"** means the form used to serve as a notification of the intention of the facility identified on the form to adhere to the provisions of these regulations.

**"Nutrient Management Plan"** or **"Plan"** means a plan written by a certified nutrient consultant in accordance with State Technical Standards to manage the amount, placement, timing and application of nutrients in order to reduce nutrient loss or runoff and to maintain the productivity of soil when growing agricultural commodities and turf grass.

**"Nutrients"** means nitrogen, phosphorus, and any other elements necessary for or helpful to plant growth.

**"Operator"** means any person in control of, or having responsibility for, the operation of the CAFO.

**"Overflow"** means the discharge of manure or process wastewater resulting from the filling of wastewater or manure storage structures beyond the point at which no more manure, process wastewater, or storm water can be contained in the structure.

**"Owner"** means any person who owns a CAFO.

**"Person"** means any individual, partnership, association, fiduciary, corporation, or any organized group of persons, whether incorporated or not.

**"Pollutant"** means for the purposes of these regulations any substance, which causes or contributes to, or may cause or contribute to, the degradation of water, and soil resources. Examples may include, but are not limited to excess nutrients, chemicals, toxic substances, industrial, municipal or agricultural wastes, etc.

**"Process Wastewater"** means any water directly or indirectly used in the operation of an AFO including, but not limited to spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits; direct contact swimming, washing, or spray cooling of animals; dust control; or any water which comes into contact with any manure or litter, bedding, or any other raw material or intermediate or final material or product used in or resulting from the production of animals or poultry or direct products (e.g., milk, eggs).

**"Production Area"** means, unless otherwise modified in this document, that part of an AFO that includes the "animal confinement area", the "manure storage area", the raw materials storage area and the "waste containment areas", egg washing or processing facility and any area used in the storage, handling, treatment or disposal of mortalities. Animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milk rooms, milking centers, cow yards, barnyards, medication pens, walkers, animal walkways, and stables. Manure Storage Area includes but is not limited to lagoons, runoff ponds, storage sheds, and stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. Waste Containment Area includes but is not limited to settling basins, and areas within berms and diversion which separate uncontaminated storm water.

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**“Realistic Yield Goals”** means the expected crop yields based on the best four (4) out of seven (7) years of recorded data. Yield goals higher than the average require written justification from a certified nutrient consultant. Without actual crop yield data, use realistic yield goals in accordance with State Technical Standards.

**“Secretary”** means the Secretary of the Delaware Department of Natural Resources and Environmental Control (or his/her designee), who shall administer the program with the assistance of the Secretary of the Delaware Department of Agriculture (or his/her designee).

**“State Nutrient Management Law”** means the law and associated regulations authorized in 3 Del. C. §2200 et.al.

**“State Nutrient Management Program”** or **“SNMP”** means all the nutrient management program elements developed by the Delaware Nutrient Management Commission, whether or not reduced to rules or regulations.

**“State Technical Standards”** means those technical standards established by the Secretary and in consultation with a collaborative group of technical experts representing technical resources and endorsed by the Delaware Nutrient Management Commission. State Technical Standards are available at the Department.

**“State Waters”** or **“Waters of the State”** means all water, on the surface and under the ground, wholly or partially within, or bordering the State, or within its jurisdiction including but not limited to: (1) waters which are subject to the ebb and flow of the tide including, but not limited to, estuaries, bays and the Atlantic Ocean; (2) all interstate waters, including interstate wetlands; (3) all other Waters of the State, such as lakes, rivers, streams (including intermittent and ephemeral streams), drainage ditches, tax ditches, creeks, mudflats, sand flats, wetlands, sloughs, or natural or impounded ponds; (4) all impoundments of waters otherwise defined as Waters of the State under this definition; (5) wetlands adjacent to waters (other than waters that are themselves wetlands) identified in the above four statements. (6) Waste and storm water treatment systems or waste storage structures including, but not limited to, treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (other than cooling ponds which otherwise meet the requirements of this definition) are not “State waters” or “Waters of the State.”

**“Stockpiling”** means the temporary location of manure piles in the production area for no more than 14 days unless the manure/litter is located under cover in an approved Manure Storage Structure. Stockpiling must be conducted and positioned in accordance with State Technical Standards.

**“Stormwater”** means runoff from rain, snow or other forms of precipitation resulting in surface runoff and drainage.

**“Storm Water Treatment System”** means a system of vegetative, structural, and other facilities or measures that control the volume, conveyance and rate of storm water runoff, and manage water quality impacts of storm water runoff. This may include constructed wetlands developed for the purpose of storm water runoff management.

**“Temporary Field Staging”** means the location of manure in a field for 90 days or less prior to its application in the land application area. Temporary Field Staging criteria and performance standards are further described in State Technical Standards.

**“Vegetated Buffer”** means a permanent strip of dense perennial vegetation naturally occurring or established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters. For the purposes of these regulations, vegetated buffers will be measured from the top of the bank of the water body that is being buffered.

**“Water Quality Standard”** means any rule or limit established by the Secretary of the Department of Natural Resources and Environmental Control which consists of a designated use or uses for Waters of the State and the water quality criteria for such waters based upon such designated uses.

**“25-Year, 24-Hour Rainfall Event”** means the runoff event produced by a storm having an annual probability of occurrence of 4%, as defined by the *National Weather Service Technical Paper Number 40, “Rainfall Frequency Atlas of the United States”(as amended)*, equivalent to

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regional or state rainfall probability information developed there from, or a rain event resulting in 6.0 inches of rainfall for New Castle county, 6.5 for Kent county and 6.7 for Sussex county in a 24-hour period.

“**100-Year, 24-Hour Rainfall Event**” means the runoff event produced by a storm having an annual probability of occurrence of 1%, as defined by the National Weather Service Technical Paper Number 40, “Rainfall Frequency Atlas of the United States”, equivalent to regional or state rainfall probability information developed there from, or a rain event resulting in 8.0 inches of rainfall for New Castle county, 8.9 for Kent county and 9.2 for Sussex county in a 24-hour period.

**3.0 Applicability**

3.1 The CAFO NPDES permit requirements described in these regulations shall apply to any person who owns or operates a CAFO where animal manure is, has been or will be generated. An Animal Feeding Operation (AFO) is a CAFO if the number of animals equal or exceed the following criteria:

3.1.1 An Animal Feeding Operation (AFO) is a Large CAFO if the number of animals equal or exceed the following criteria:

1,000	Cattle other than mature dairy cows or veal calves. Includes but is not limited to heifers, steers, bulls, and cow/calf pairs.
700	mature dairy cattle (whether milked or dry cows),
2,500	swine each weighing over 55 pounds,
10,000	swine weighing under 55 pounds,
500	horses,
10,000	sheep or lambs,
55,000	turkeys,
30,000	laying hens or broilers, if the AFO uses a liquid manure handling system,
125,000	chickens except laying hens (if other than a liquid manure handling system),
82,000	laying hens (if other than a liquid manure handling system),
1,000	veal calves.
30,000	ducks (if the AFO uses other than a liquid manure handling system),
5,000	ducks (if the AFO uses a liquid manure handling system).

3.1.2 An Animal Feeding Operation (AFO) is a Medium CAFO if

3.1.2.1 The number of animals equal or exceed the following criteria; and

300 to 999	Cattle other than mature dairy cows or veal calves. Includes but is not limited to heifers, steers, bulls, and cow/calf pairs.
200 to 699	mature dairy cattle (whether milked or dry cows),
750 to 2,499	swine each weighing over 55 pounds,
3,000 to 9,999	swine weighing under 55 pounds,
150 to 499	horses,
3,000 to 9,999	sheep or lambs,
16,500 to 54,999	turkeys,
9,000 to 29,999	laying hens or broilers, if the AFO uses a liquid manure handling system,
37,500 to 124,999	chickens except laying hens (if other than a liquid manure handling system),
25,000 to 81,999	laying hens (if other than a liquid manure handling system),
300-999	veal calves.
10,000 to 29,999	ducks (if the AFO uses other than a liquid manure handling system),
1,500 to 4,999	ducks (if the AFO uses a liquid manure handling system).

3.1.2.2 Either one of the following conditions are met:

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3.1.2.2.1 Pollutants originating from the CAFO are discharged directly or indirectly into Waters of the State; or through a man-made ditch, flushing system, or other similar man-made device; or

3.1.2.2.2 Pollutants are discharged directly into Waters of the State which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

3.2 Designation of a CAFO. The Secretary or his designee may designate any AFO as a CAFO upon determination that it is a significant contributor of pollutants to Waters of the State.

3.2.1 The Secretary has the authority to designate a CAFO based on the following conditions:

3.2.1.1 The size of the AFO and the amount of pollutants reaching Waters of the State;

3.2.1.2 The location of the AFO relative to Waters of the State;

3.2.1.3 The means of conveyance of manure, litter or process wastewaters into Waters of the State;

3.2.1.4 The slope, vegetation, and other factors affecting the likelihood or frequency of discharge of manure, litter or process wastewaters into Waters of the State; or

3.2.1.5 Other relevant factors at the discretion of the Secretary.

3.2.2 No AFO shall be designated under this paragraph unless the Department has conducted an on-site inspection of the operation. No AFO with numbers below those established in section 3.1.2.1 of these regulations may be designated as a CAFO unless:

3.2.2.1 Pollutants are discharged into Waters of the State through a manmade ditch, flushing system, or other similar manmade device; or

3.2.2.2 Pollutants are discharged directly into Waters of the State which originate outside of the facility and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

3.2.3 AFOs designated as a CAFO are subject to the CAFO NPDES permit regulations specified under these regulations and the Nutrient Management Law (3 Del. C. §2200 et.al.). AFOs designated as CAFOs will be notified in writing by the Secretary.

3.3 State Technical Standards set out guidance and expectations for the owner and operator in complying with these regulations. They are intended to provide flexibility in keeping up with technical and scientific advancements and to provide increased consistency in the administration of the Nutrient Management Program.

#### **4.0 Application for Coverage**

##### **4.1 Duty to Apply.**

4.1.1 Any owner or operator of a Large, Medium, or Designated CAFO who does not have an effective NPDES CAFO permit has a duty to apply for a NPDES CAFO permit when:

4.1.1.1 Pollutants originating from the CAFO are discharged or proposed to discharge directly or indirectly into Waters of the State; or

4.1.1.2 Pollutants originating from a CAFO are discharged into Waters of the State caused by handling of animal mortalities or manure; or

4.1.1.3 Pollutants originating from a CAFO are proposed for discharge as a result of the design, construction, operation or maintenance of a CAFO such that a discharge will occur; or

4.1.1.4 Pollutants from a large CAFO are discharged into Waters of the State from the land application area as agricultural storm water, except for discharges falling within the agricultural storm water exemption;

4.1.1.4.1 Large CAFOs experiencing a precipitation related discharge of manure, litter, or process wastewater from land application areas under control of a large CAFO that is not required to apply for a NPDES CAFO permit, shall be considered an agriculture storm water discharge only where land application has occurred and is

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in compliance with a nutrient management plan with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater and which minimize nitrogen and phosphorus movement to surface waters. Unpermitted Large CAFOs shall maintain compliance with the state Nutrient Management Law (3 Del. C. §2200 et.al.) and make such documentation available to the Secretary upon request.

4.1.2 Any owner or operator of a CAFO meeting the requirements of §4.1.1 of these regulations shall apply for a NPDES CAFO permit by submitting a Notice of Intent (NOI) on the prescribed form within 90 calendar days of the effective date of these regulations except for:

4.1.2.1 Newly constructed CAFOs not subject to effluent guidelines and new sources shall submit a NOI at least 180 days prior to commencement of operations or as assigned by the Secretary.

4.1.2.2 Expanded CAFOs that become a CAFO as a result of the expansion shall submit a NOI within 90 days of meeting the definition as a CAFO.

4.1.2.3 CAFO owners or operators shall submit a NOI within 90 days of being designated as a CAFO in accordance with §3.2 of these regulations.

4.2 The NOI shall serve as a formal commitment by the CAFO owner or operator to comply with the standards established in these regulations.

4.3 The NOI for a NPDES CAFO permit shall be made and signed by the owner or operator of the facility or activity generating the discharge.

4.4 The NOI shall include, but not be limited to, the following information:

4.4.1 The trade name of the CAFO, type of business (corporation, sole proprietorship, partnership, etc), if any, the name of the owner and operator, mailing address for the owner and operator, and emergency address or description of the location of the CAFO including the closest road name intersection of the CAFO.

4.4.2 Annual operation data for the CAFO in accordance with State Technical Standards to include, but not limited to animal type(s), number of animals confined, estimated manure, litter and process wastewater generation by type per year, manure storage capacity, manure storage system, estimated amount of manure transported off-site, animal mortality system, process wastewater system generated, where applicable, and total number of acres under control of the CAFO and available for land application.

4.4.3 A copy of the Nutrient Management Plan or Animal Waste Management Plan meeting the requirements described in §5.0 of these regulations shall be submitted with the NOI to the Department in the method specified on the NOI form.

4.5 The Secretary will review the NOI and may request additional information from the owner or operator.

**5.0 Nutrient Management Plans or Animal Waste Management Plans**

5.1 For purposes of compliance with these regulations a nutrient management plan or animal waste management plan shall be written by a certified nutrient consultant in accordance with State Technical Standards and shall contain the following applicable contents:

5.1.1 Plan Identification:

5.1.1.1 Owner and operator name, owner and operator mailing address, county road number or name, telephone number and watershed designation of operation.

5.1.1.2 The trade name of the CAFO, type of business (corporation, sole proprietorship, partnership, etc), mailing address, contact information for, but not limited to the owner and operator, and emergency address or location description to include the closest road name intersection of the CAFO.

5.1.1.3 Nutrient consultant's name and company:

5.1.1.3.1 Address and telephone number.

5.1.1.3.2 Nutrient consultant certification number.

5.1.1.3.3 Date of plan and duration of animal waste or

nutrient management plan.



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5.1.1.4 Total acres owned, licensed, or leased by the CAFO owner and operator represented in the nutrient management plans or animal waste management plan and a brief description of agricultural commodities produced within the CAFO.

5.1.1.5 Certification statement signed by the owner or operator stating the owner and operator shall implement the nutrient management or animal waste management plan.

5.1.2 Field maps or aerial photographs that include the following:

5.1.2.1 Individual field identification and boundaries for all owned, licensed or leased fields under control of the CAFO owner or operator.

5.1.2.2 A copy of soil survey map showing all soil types on each field or the soil texture identification of all pertinent soils.

5.1.2.3 The location of all surface waters including drainage ditches, streams, ponds, etc.

5.1.2.4 Irrigation systems where applicable.

5.1.2.5 Latitude and longitude of the production area will be maintained by the Department in the NPDES CAFO permit case file for each CAFO NOI received.

5.1.3 Crop and Nutrient Information:

5.1.3.1 The total number and type of animals, annual quantity estimate of manure and litter generation and storage methods.

5.1.3.2 Description and method of temporary outside locations of manure.

5.1.3.3 Total acres owned, licensed or leased by the CAFO owner or operator subject to the animal waste management plan or nutrient management plan and summary of needed nutrients.

5.1.3.4 Realistic yield goal in accordance with State Technical Standards.

5.1.3.5 Soil test results using protocols established in the State Technical Standards.

5.1.3.6 Current and planned crop rotation.

5.1.3.7 Determine the rate of application of nitrogen and phosphorus using the narrative rate approach or the linear rate approach in accordance with State Technical Standards.

5.1.3.7.1 Determine nitrogen application rates for each field based on realistic yield goal of crop(s) to be grown and in accordance with State Technical Standards.

5.1.3.7.2 Determine the phosphorus application rates for each field in accordance with State Technical Standards.

5.1.3.7.3 The linear rate approach includes maximum application rates from manure, litter and process wastewater for each year of NPDES CAFO permit coverage, for each crop identified in the nutrient management plan, in chemical forms determined to be acceptable to the Secretary, in pound per acre, per year, for each field to be used for land application, and certain factors necessary to determine such rates. At a minimum, these factors must include:

5.1.3.7.3.1 The outcome of a field-specific assessment of the potential for nitrogen and phosphorus transport from each field;

5.1.3.7.3.2 The crops to be planted in each field or any other uses of a field such as pasture or fallow fields;

5.1.3.7.3.3 The realistic yield goal for each crop or use identified for each field;

5.1.3.7.3.4 The nitrogen and phosphorus recommendations from sources specified by the Secretary for each crop or use identified for each field;

5.1.3.7.3.5 Credits for all nitrogen in the field that will be plant available;

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- phosphorus application; and
- 5.1.3.7.3.6 Consideration of a multi-year
- plant available nitrogen and phosphorus to the field;
- 5.1.3.7.3.7 Accounting for all other additions of
- 5.1.3.7.3.8 For land applications include:
- 5.1.3.7.3.8.1 The form and source of manure,
- litter, process wastewater to be land applied;
- 5.1.3.7.3.8.2 The timing and method of land
- application;
- 5.1.3.7.3.8.3 The methodology by which the
- nutrient management plan accounts for the amount of nitrogen and phosphorus in the manure,
- litter, and process wastewater to be land applied.
- 5.1.3.7.3.9 Large CAFOs that use this approach
- must calculate the maximum amount of manure, litter, and process wastewater to be land applied
- at least once each year using the results of the most recent representative manure, litter, or
- process wastewater tests for nitrogen and phosphorus taken within 12 months of the date of land
- application.
- 5.1.3.7.4 The narrative rate approach must include the
- maximum amounts of nitrogen and phosphorus derived from all sources of nutrients, for each
- crop identified in the nutrient management plan, in chemical forms determined to be acceptable
- by the Secretary, in pounds per acre, for each field, and certain factors necessary to determine
- such amounts.
- 5.1.3.7.4.1 At a minimum, the factors must include:
- 5.1.3.7.4.1.1 The outcome of a field-specific
- assessment of the potential for nitrogen and phosphorus transport from each field;
- 5.1.3.7.4.1.2 The crops to be planted in each
- field or any other uses such as pasture or fallow fields (including alternative crops);
- 5.1.3.7.4.1.3 The realistic yield goal for each
- crop or use identified for each field; and
- 5.1.3.7.4.1.4 The nitrogen and phosphorus
- recommendations from sources specified by the Secretary for each crop or use identified for each
- field.
- 5.1.3.7.4.2 In addition, the terms of the nutrient
- management plan must include the methodology by which the nutrient management plan
- accounts for the following factors when calculating the amounts of manure, litter, and process
- wastewater to be land applied:
- 5.1.3.7.4.2.1 Results of soil tests conducted
- in accordance with protocols identified in the nutrient management plan and State Technical
- Standards;
- 5.1.3.7.4.2.2 Credits for all nitrogen in the
- field that will be plant available;
- 5.1.3.7.4.2.3 The amount of nitrogen and
- phosphorus in the manure, litter, and process wastewater to be applied;
- 5.1.3.7.4.2.4 Consideration of multi-year
- phosphorus application;
- 5.1.3.7.4.2.5 Accounting for all other
- additions of plant available nitrogen and phosphorus to the field;
- 5.1.3.7.4.2.6 The form and source of manure,
- litter, and process wastewater;
- 5.1.3.7.4.2.7 The timing and method of land
- application; and
- 5.1.3.7.4.2.8 Volatilization of nitrogen and
- mineralization of organic nitrogen.

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5.1.3.7.4.3 The terms of the nutrient management plan shall include alternative crops identified in the CAFO's nutrient management plan that are not in the planned crop rotation. Where a CAFO includes alternative crops in its nutrient management plan, the crops must be listed by field, in addition to the crops identified in the planned crop rotation for that field, and the nutrient management plan must include realistic crop yield goals and the nitrogen and phosphorus recommendations from sources specified by the Secretary for each crop. Maximum amounts of nitrogen and phosphorus from all sources of nutrients and the amounts of manure, litter, and process wastewater to be applied must be determined in accordance with the methodology described in State Technical Standards.

5.1.3.7.4.4 For CAFOs using the narrative rate approach, the following projections must be included in the nutrient management plan submitted to the Secretary, but are not terms of the nutrient management plan:

5.1.3.7.4.4.1 The CAFO's planned crop rotations for each field for the period of permit coverage;

5.1.3.7.4.4.2 The projected amount of manure, litter, or process wastewater to be applied;

5.1.3.7.4.4.3 Projected credits for all nitrogen in the field that will be plant available;

5.1.3.7.4.4.4 Consideration of multi-year phosphorus application;

5.1.3.7.4.4.5 Accounting for all other additions of plant available nitrogen and phosphorus to the field; and

5.1.3.7.4.4.6 The predicted form, source, and method of application of manure, litter, and process wastewater for each crop.

5.1.3.7.4.4.7 Timing of application for each field, insofar as it concerns the calculation of rates of application, is not a term of the nutrient management plan.

5.1.3.7.4.5 CAFOs that use the narrative rate approach must calculate maximum amounts of manure, litter, and process wastewater to be land applied at least once each year using the methodology required in State Technical Standards before land applying manure, litter, and process wastewater and must rely on the following data:

5.1.3.7.4.5.1 A field-specific determination of soil levels of nitrogen and phosphorus, including, for nitrogen, a concurrent determination of nitrogen that will be plant available consistent with the methodology required by State Technical Standards, and for phosphorus, the results of the most recent soil test conducted in accordance with soil testing requirements in accordance with State Technical Standards; and

5.1.3.7.4.5.2 The results of most recent representative manure, litter, and process wastewater tests for nitrogen and phosphorus taken within 12 months of the date of land application, in order to determine the amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied.

5.1.3.8 Manure, litter and process wastewater analysis using protocols established in State Technical Standards-

5.1.3.9 Estimate residual nitrogen (organic nutrients, fertilizer, or legume crops from prior year) in absence of a Pre-sidedress Soil Nitrate Test (PSNT) in accordance with State Technical Standards.

5.1.3.10 Describe the nitrogen and phosphorus source(s) selected, rates and approximate timing of application(s).

5.1.3.11 Determine the appropriate application of manure, litter and process wastewater within the application area in accordance with State Technical Standards.

5.1.4 Description of minimum best management practices (BMPs) in place and to be implemented in the production area and in the land application area in accordance with State Technical Standards to include, but not limited to:

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5.1.4.1 Provide an overall manure balance budget that clearly identifies available manure, intended manure use, manure storage capacity, and excess manure.

5.1.4.1.1 This budget shall identify the intended use to include, but not limited to land application, exportation, or other described uses in accordance with State Technical Standards.

5.1.4.1.2 The CAFO owner or operator shall account for excess manure in the annual Nutrient Management Report.

5.1.4.2 Provide a description of manure storage capacity and general schedule or timeframe when manure is removed or transported to a temporary field staging, land application area, exportation or other uses to include but not be limited to:

5.1.4.2.1 Management practices to prevent manure storage, collection, and conveyance systems from leaking pollutants to Waters of the State.

5.1.4.2.1.1 For liquid storage: storage shall be managed to prevent a discharge of pollutants and must include a calendar plan for liquid and sediment removal, with a freeboard action level of not less than one foot, with a depth marker.

5.1.4.2.1.2 For solid storage: permanent and temporary storage shall be managed to prevent a discharge of pollutants and be consistent with State Technical Standards.

5.1.4.2.2 Emergency actions for spills and catastrophic events for liquid storage systems to include the volume of water generated and collected by a 25-year, 24-hour rainfall event.

5.1.4.3 Describe adequate storage methods for manure, litter and process wastewater, and proper operation and maintenance of the storage facilities in accordance with State Technical Standards.

5.1.4.4 Provide a description and action plan to divert or segregate all clean water as appropriate from the production area and for collecting all water coming in contact with the production area in accordance with State Technical Standards to include but not limited to the following categories:

5.1.4.4.1 Approved methods in accordance with State Technical Standards to prevent direct contact between animals and Waters of the State; and

5.1.4.4.2 Approved methods in accordance with State Technical Standards to prevent runoff from coming into contact with manure, litter, or process wastewater.

5.1.4.5 Provide a detailed animal mortality plan to include but not be limited to the following contents:

5.1.4.5.1 Provide a statement acknowledging that burial of dead animals is prohibited. The State Veterinarian may approve this practice under emergency circumstances such as serious bio-security threats.

5.1.4.5.2 Provide a description of the methods and procedures for daily handling and disposal of dead animals in a manner to prevent contamination of Waters of the State. Disposal of mortalities is strictly prohibited in liquid manure, storm water, or process wastewater storage or treatment areas.

5.1.4.5.3 Methods and procedures for handling catastrophic mortalities in accordance with State Technical Standards.

5.1.4.6 Describe conservation practices to control nutrient loss sufficient to minimize the discharge of pollutants to Waters of the State to be implemented on the CAFO in accordance with State Technical Standards.

5.1.4.6.1 Identify manure and processed wastewater application setbacks to be implemented on the CAFO in accordance with State Technical Standards. The direct application of manure or processed wastewater to Waters of the State is prohibited. The following three setback standards are provided as three options:

5.1.4.6.1.1 One-hundred (100) foot application setback measured from the top of the bank of the water of the state to be protected, (Unless the CAFO exercises one of the compliance alternatives provided for in paragraphs 5.1.4.6.1.2, or

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5.1.4.6.1.3, of this section, manure, litter and process wastewater may not be applied closer than 100 feet to any down-gradient surface waters, open tile intakes structures, sinkholes, agricultural well heads or other conduits to surface water.) and/or

5.1.4.6.1.2 Thirty-five (35) foot vegetated buffer measured from the top of the bank of the water of the state to be protected, where applications of manure, litter, and process wastewater are prohibited, and/or

5.1.4.6.1.3 Alternative compliance practices as follows:

5.1.4.6.1.3.1 Minimum ten (10) foot vegetated buffer measured from the top of the bank of the water of the state to be protected, and plant a winter cover crop in accordance with State Technical Standards following the crop receiving manure, litter or process wastewater for fields with high phosphorus soils and; or

5.1.4.6.1.3.2 Minimum ten (10) foot application setback measured from the top of the bank of the water of the state to be protected, and plant a winter cover crop in accordance with State Technical Standards following crops receiving manure, litter or process wastewater in areas without high phosphorus soils.

5.1.4.6.1.3.3 Any additional approved alternative compliance practices identified in the State Technical Standards.

5.1.4.7 Chemicals and other contaminants handled on-site shall not be disposed of in any manure, litter, process wastewater, or storm water storage or treatment system.

5.2 A CAFO nutrient management plan or animal waste management plan shall be provided and implemented for the term of the CAFO NPDES Permit upon submittal of the NOI. Upon expiration of the NPDES CAFO permit, or upon substantial changes to the CAFO, as defined in §8.4 of these regulations, or when the CAFO owner or operator makes changes to the nutrient management plan or animal waste management plan, a new plan must be provided. Such plans shall be reported to the Department no later than December 15 of the year in which they are required to be updated. Where the owner or operator makes changes to the nutrient management plan or animal waste management plan, they shall also identify the changes, as required by §8.4.1 of these regulations.

**6.0 Terms and Conditions of CAFO NPDES Permits.**

6.1 Each owner or operator covered by these regulations shall meet or exceed the minimum conditions or terms of a NPDES CAFO permit that consists of the following and applicable contents.

6.1.1 Standard Conditions for all NPDES CAFO Permits

6.1.1.1 Duty to Comply. Failure to comply with the terms of a NPDES CAFO permit or these regulations shall constitute a violation of these regulations and shall be grounds for enforcement action as provided in 3 **Del. C.** §2200 et.al. and 7 **Del. C.** §6000 et.al. The Department may seek voluntary compliance with a warning, notice or other educational means. However, the law does not require that such voluntary means be used before proceeding with enforcement.

6.1.1.2 Duty to Mitigate. Any person subject to these regulations shall take all reasonable steps to minimize or prevent any discharge of pollutants in violation of these regulations.

6.1.1.3 Need to Halt or Reduce Activity Not a Defense. Owners and operators subject to these regulations may not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in question to maintain compliance with the conditions of the permit and these regulations.

6.1.1.4 Property Rights. The issuance of a NPDES CAFO permit under the requirements of these regulations does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property, nor any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

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6.1.1.5 Modification, Revocation, Reissuance, and Termination of NPDES CAFO Permit Coverage. The NPDES CAFO permit may be modified, terminated or revoked and reissued in whole or in part, during its term, for cause by the Secretary. The filing of a request for NPDES CAFO permit modification, or revocation and reissuance, or termination, or a notification of any changes or anticipated noncompliance does not stay any NPDES CAFO permit condition;

6.1.1.6 Requirement to Implement a Site Specific Nutrient Management Plan or Animal Waste Management Plan. Any NPDES CAFO permit issued to a CAFO owner or operator shall require the CAFO owner or operator to implement and fully comply with a nutrient management plan or animal waste management plan as described in §5.0 of these regulations developed by a Delaware certified nutrient consultant that contains site specific best management practices necessary to meet the requirements of this paragraph and applicable effluent limitation and standards as specified in these regulations. Violation of the terms of the nutrient management plan or animal waste management plan incorporated into the NPDES CAFO permit shall constitute a violation of the NPDES CAFO permit.

6.1.1.7 Reporting and Emergency Notification Requirements

6.1.1.7.1 Annual Reporting Requirements: Each person covered by these regulations shall submit an annual report by March 1 for the previous calendar year on a form provided by the Department including but not limited to the following:

6.1.1.7.1.1 Owner's and Operator's name, mailing address and telephone number.

6.1.1.7.1.2 Certified Nutrient consultant's name and company.

6.1.1.7.1.3 Date nutrient management plan or animal waste management plan was prepared and duration of plan.

6.1.1.7.1.4 Total acres covered by the nutrient management plan or animal waste management plan and a brief description of agricultural commodities produced within the CAFO.

6.1.1.7.1.5 A statement indicating whether the current version of the CAFO's nutrient management plan or animal waste management plan was developed or approved by a certified nutrient consultant.

6.1.1.7.1.6 The annual operating data to include animal type(s), number of animals confined and manure, litter and process wastewater generation by type;

6.1.1.7.1.7 The quantity of animal manure, litter and process wastewater in tons or thousand gallons applied to land managed by the CAFO owner or operator and the quantity of land to which applied;

6.1.1.7.1.8 The quantity of inorganic fertilizers applied to the land and the quantity of land to which applied;

6.1.1.7.1.9 The quantity and type of manure, litter or process wastewater exported from the CAFO; and

6.1.1.7.1.10 The name, address and organization of person(s) receiving and/or responsible for utilizing the manure;

6.1.1.7.1.11 Summary of all manure, litter and process wastewater discharges from the production areas that have occurred in the previous calendar year, including date, time, and approximate volume;

6.1.1.7.1.12 The actual crop(s) planted,

6.1.1.7.1.13 The statement (as provided on the annual report form) certifying whether actual yields for each crop met or exceeded the expected yield and actual yields;

6.1.1.7.1.14 The actual nitrogen and phosphorus content of the manure, litter and process wastewater,

6.1.1.7.1.15 The results of calculations conducted in accordance with these regulations,

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6.1.1.7.1.16 The amount of manure, litter, and process wastewater applied to each crop during the previous calendar year; and

6.1.1.7.1.17 For any CAFO that implements a nutrient management plan that addresses rates of application in accordance with these regulations, the results of any soil testing for nitrogen and phosphorus taken during the previous calendar year, and the data used in calculations conducted in accordance with these regulations.

6.1.1.7.2 Emergency Notification: If for any reason, there is a discharge of pollutants from a CAFO the owner or operator shall verbally notify the Delaware Department of Agriculture (Nutrient Management Program) at 1-800-282-8685 and DNREC Emergency Response Branch at 1-800-662-8802 within 24 hours of becoming aware of the discharge and document the incident in writing within five (5) days. The information to be provided shall include:

6.1.1.7.2.1 A description of the discharge and cause, including a description of the flow path to the receiving waters, an estimate of the flow and volume discharged.

6.1.1.7.2.2 The period of discharge, including exact dates and times and if not corrected, the anticipated time the discharge is expected to continue and the steps being taken to reduce, eliminate and prevent recurrence of the discharge.

6.1.1.7.2.3 If the discharge was caused by a precipitation event(s), the amount of rainfall, as measured with a rain gauge at the site.

6.1.1.7.2.4 Results of any sampling and analysis of the discharge, if available.

6.1.1.7.2.5 For further questions or assistance, call the Delaware Department of Agriculture at 1-800-282-8685, (Nutrient Management Program), and DNREC Emergency Response Branch at 1-800-662-8802.

6.1.1.8 Duration of NPDES CAFO permits, Continuation of Expiring NPDES CAFO permits, and Transferability of NPDES CAFO permits

6.1.1.8.1 Duration of NPDES CAFO Permits. All NPDES CAFO permits shall be issued for fixed terms not to exceed five years. NPDES CAFO permits of less than five years duration may be issued in appropriate circumstances. NPDES CAFO permits may be modified, revoked and reissued, or terminated as specified in §6.1.1.5. Except for the continuation provisions of §6.1.1.8.2 of these regulations for expiring NPDES CAFO permits, the term of a NPDES CAFO permit shall not be extended beyond five years from its original date of effectiveness by modification, extension or other means.

6.1.1.8.2 Continuation of Expiring NPDES CAFO Permits.

6.1.1.8.2.1 The terms and conditions of an expired NPDES CAFO permit are automatically continued pending issuance of a new or reissued NPDES CAFO permit if:

6.1.1.8.2.1.1 The owner or operator has submitted a timely and sufficient NOI for a new or reissued NPDES CAFO permit under at least 180 days prior to the NPDES CAFO permit expiration date; and

6.1.1.8.2.1.2 The Department is unable, through no fault of the owner or operator, to issue a new NPDES CAFO permit before the expiration date of the previous NPDES CAFO permit.

6.1.1.8.2.1.3 NPDES CAFO permits continued under §6.1.1.8.2 of these regulations remain fully effective.

6.1.1.8.3 Transferability of NPDES CAFO Permits.

6.1.1.8.3.1 NPDES CAFO Permit Transfer. The NPDES CAFO permit is not transferable to any person, except after notice to and with the concurrence of the Secretary. The owner or operator may request a NPDES CAFO permit transfer by:

6.1.1.8.3.1.1 The owner or operator shall notify the Secretary, in writing, at least 30 days prior to the proposed transfer;

6.1.1.8.3.1.2 Submit a written agreement to the Secretary, signed by all parties to the transfer, containing a specific date for transfer of NPDES

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CAFO permit responsibility and coverage between the current and new owners or operators (including acknowledgement that the existing owner or operator is liable for violations up to that date, and that the new owner or operator is liable for violations from that date on); and

6.1.1.8.3.1.3 If the Department does not notify the current owner or operator and the new owner or operator of its intent to modify, revoke and reissue, or terminate the NPDES CAFO permit and to require that a new NOI be filed rather than agreeing to the transfer of the NPDES CAFO permit within 30 days of receipt of the notification of the proposed transfer; and

6.1.1.8.3.1.4 If the owner or operator shall provide adequate advance notice of a proposed transfer to allow sufficient time for the Department to modify the NPDES CAFO permit to identify the new owner or operator and incorporate such other requirements as may be necessary under the Law or the Act; then

6.1.1.8.3.1.5 Such a transferred NPDES CAFO permit shall, as of the date of transfer, be as fully effective as if it had been issued directly to the new owner or operator.

6.1.1.9 Duty to maintain NPDES CAFO permit coverage: No later than 180 days before the expiration of the NPDES CAFO permit, the owner or operator shall submit an NOI to renew its NPDES CAFO permit, unless the CAFO has ceased to operate as a CAFO, or will not discharge or propose to discharge upon expiration of the NPDES CAFO permit.

6.1.1.10 Cease NPDES CAFO permit coverage: The owner or operator may request to cease NPDES CAFO permit coverage by submitting a request in writing to the Secretary with a justification for the request. The justification shall explain why the owner or operator no longer has a duty to apply for NPDES CAFO permit coverage. The Secretary will approve or deny the request within 180 days.

6.1.1.11 Entry and Evaluation

6.1.1.11.1 The Secretary, or authorized designee, shall be authorized to evaluate implementation of these regulations and furthermore be allowed to:

6.1.1.11.1.1 Enter and inspect the CAFO subject to these regulations

6.1.1.11.1.2 Have access to and the right to copy, at reasonable times, any records that must be kept under the conditions of these regulations.

6.1.1.11.1.3 Sample or monitor any soil, manure, litter, process wastewater, surface waters, and discharges from the site.

6.1.1.11.2 The owner and operator may or may not be notified in advance of entry and evaluation. Entry and evaluation shall be in accordance with any biosecurity requirements of the individual or commodity industry involved. As a general practice DNREC and DDA will provide advance notice of inspections; however, in order to ensure compliance, unannounced inspections may be performed.

6.2 Terms and Conditions for Large Horse and Sheep CAFO NPDES Permits

6.2.1 Effluent Limits

6.2.1.1 Existing Large CAFOs. Any existing Large Horse or Sheep CAFOs must achieve the following effluent limits attainable by the application of best available technology economically achievable (BAT):

6.2.1.1.1 There shall be no discharge of process wastewater pollutants to Waters of the State from the production area.

6.2.1.1.2 Whenever rainfall events cause an overflow of process wastewater from a facility designed, constructed, operated, and maintained to contain all process-generated wastewaters plus the runoff from a 25-year, 24 hour rainfall event at the CAFO when BAT has been applied any process wastewater pollutants in the overflow may be discharged into Waters of the State.

6.2.1.2 New Source Performance Standards for Large Horse or Sheep CAFOs. Any new source must achieve the following performance standard:

6.2.1.2.1 There shall be no discharge of process wastewater into Waters of the State from the production area.



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6.2.1.2.2 The overflow of process waste water from the production area may be discharged whenever rainfall events, either chronic or catastrophic, occurs from a facility designed, constructed, operated and maintained to contain all process waste waters plus the runoff from a 25 year, 24 hour rainfall event for the location of the point source.

6.2.2 Recordkeeping Requirements for new and existing Large Horse or Sheep CAFOs.

6.2.2.1 Those owners or operators requiring a NPDES CAFO permit in accordance with these regulations shall maintain records of implementation for six years at the CAFO in accordance with State Technical Standards. All animal waste management plans, nutrient management plans, site-specific management requirements and records of implementation shall be kept by the owners or operators. Animal waste management plans, nutrient management plans and records of implementation shall be made available for inspection and by request of the Secretary.

6.2.2.1.1 Records of implementation in the Production Area shall include, but are not limited to:

6.2.2.1.1.1 Records indicating mortality management to include number disposed and method of disposal.

6.2.2.1.1.2 Records of manure storage activities, length of storage, amount stored, and maintenance of manure storage facilities.

6.2.2.1.1.3 Records indicating the following routine visual inspections of the CAFO production area were conducted. At a minimum the following must be visually inspected:

6.2.2.1.1.3.1 The CAFO owner or operator shall document any deficiencies and/or necessary corrective actions resulting from the inspections and the date deficiencies were corrected. Deficiencies shall be corrected in 30 days. Deficiencies not corrected in 30 days shall be accompanied by an explanation of the factors preventing immediate correction.

6.2.2.1.1.3.2 Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the wastewater and manure storage containment structure;

6.2.2.1.1.3.3 Daily inspection of water lines, including drinking water or cooling water lines;

6.2.2.1.1.3.4 Weekly inspections and records of depth of the manure, litter, and process wastewater impoundments; the inspection shall note the level in liquid impoundments as indicated by a depth marker.

6.2.2.1.1.3.4.1 All open surface liquid impoundments shall have a permanent depth marker or recorder installed at the maximum operating level to indicate when drawdown should begin and that provides for the required volume less the volume contribution of precipitation and runoff from the 25-year, 24-hour storm event plus the volume allowance for residual solids after liquids have been removed.

6.2.2.1.1.4 Records of the date, time, and estimated volume of any overflow.

6.2.2.1.1.5 Records documenting the current design of any manure or litter storage structures, including volume for solids accumulation, design treatment volume, total volume design, and approximate number of days of storage.

6.2.2.1.2 Records of implementation in the Land Application Area shall include, but are not limited to:

6.2.2.1.2.1 Manure, litter, process wastewater and soil test results, methods for testing and analyzing, and recommended nitrogen and phosphorus application rates with an explanation of the basis for determining manure application rates, as provided in the protocols established in the State Technical Standards or the nutrient management plan.

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- 6.2.2.1.2.2 Quantities, calculations, analyses and sources of all nitrogen and phosphorus applied to fields.
- 6.2.2.1.2.3 Dates, weather conditions at the time of manure, litter or process wastewater land application and 24 hours before and after application, and methods of application(s).
- 6.2.2.1.2.4 Crops planted, yields, and plant matter (grain, silage, etc.) removed from the land.
- 6.2.2.1.2.5 Records indicating periodic inspections and maintenance of land application equipment for leaks.
- 6.2.2.1.3 Off site use of manure, litter or process wastewater. If manure, litter or process wastewater is sold or given to other persons for disposal or utilization, the following information shall be maintained at the CAFO generating the manure, litter or process wastewater:
- 6.2.2.1.3.1 The date of manure, litter or process wastewater removal.
- 6.2.2.1.3.2 Name of receiver and contact information.
- 6.2.2.1.3.3 Quantity (tons/gallons) of manure, litter or process wastewater removed.
- 6.2.2.1.3.4 A copy of the most recent manure, litter and process wastewater nutrient analysis shall be given to the receiver on or before the date of transfer.
- 6.2.2.1.4 The annual report and supporting documents.
- 6.3 Terms and Conditions for Large Dairy Cows and Cattle other than Veal Calves CAFO NPDES Permits
- 6.3.1 Effluent Limits for Large Dairy Cows and Cattle other than Veal Calves CAFOs
- 6.3.1.1 Existing Large Dairy Cows and Cattle other than Veal Calves CAFOs. Any existing Large Dairy Cows and Cattle other than Veal Calves CAFOs must achieve the following effluent limits attainable by the application of best practicable control technology currently available (BPT), best conventional pollutant control technology (BCT), or attainable by the application of the best available technology economically achievable (BAT):
- 6.3.1.1.1 Large Dairy Cows and Cattle other than Veal Calves CAFO Production Areas. There shall be no discharge of manure, litter or process wastewater pollutants to Waters of the State from the production area of large dairy cows and cattle other than veal calves CAFOs.
- 6.3.1.1.1.1 Whenever precipitation causes an overflow of manure, litter or process wastewater, pollutants in the overflow may be discharged into Waters of the State if:
- 6.3.1.1.1.1.1 The production area is designed, constructed, operated, and maintained to contain all manure, litter, and process wastewaters plus the runoff and direct precipitation from a 25-year, 24 hour rainfall event; and
- 6.3.1.1.1.1.2 The production area is operated in accordance with the measures and records required in §6.3.2 of these regulations.
- 6.3.1.1.1.2 Voluntary alternative performance standards. Any CAFO owner and operator subject to these regulations may request the Secretary to establish, in his or her discretion CAFO NPDES permit effluent limits based on site-specific alternative technologies that achieve a quantity of pollutants discharged from the production area equal to or less than the quantity of pollutants that would be discharged under the baseline performance standards.
- 6.3.1.1.1.2.1 The CAFO owner and operator requesting alternative performance standards shall provide supporting technical analysis as described in State Technical Standards and other relevant information and data to support such site-specific limitations to the Secretary within the time frame provided. The supporting technical

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analysis must include calculation of the quantity of pollutants discharged, on a mass basis where appropriate, based on a site specific analysis of a system designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater, including runoff from a 25 year, 24 hour rainfall event.

6.3.1.1.1.2.2 The technical analysis of the discharge of pollutants must include:

6.3.1.1.1.2.2.1 All daily inputs to the storage system, including manure, litter, all process wastewaters, direct precipitation, and runoff.

6.3.1.1.1.2.2.2 All daily outputs from the storage system, including losses due to evaporation, sludge removal, and the removal of wastewater for use on cropland at the CAFO or transport off site.

6.3.1.1.1.2.2.3 A calculation determining the predicted median annual overflow volume based on a 25 year period of actual rainfall data applicable to the site.

6.3.1.1.1.2.2.4 Site specific pollutant data, including N, P, BOD5, TSS, for the CAFO from representative sampling and analysis of all sources of input to the storage system, or other appropriate pollutant data.

6.3.1.1.1.2.2.5 Predicted annual average discharge of pollutants, expressed where appropriate as a mass discharge on a daily basis (lbs/day), and calculated considering the requirements in this section.

6.3.1.1.2 Large Dairy Cows and Cattle other than Veal Calves CAFO Land Application Areas. Discharges from existing land application areas for large dairy cows, and cattle other than veal calves CAFOs are subject to the following requirements:

6.3.1.1.2.1 Develop and implement best management practices including in accordance with State Technical Standards, including but not limited to:

6.3.1.1.2.1.1 Nutrient Management Plan which incorporates a field specific assessment of the potential of nitrogen and phosphorus transport from the field and that addresses the form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals while minimizing nitrogen and phosphorus movement to surface waters.

6.3.1.1.2.1.2 Determine application rates for manure, litter and process wastewater applied to the CAFO to minimize movement of excess nitrogen and phosphorus from the field to surface waters in accordance with State Technical Standards.

6.3.1.1.2.1.3 Sample and analyze manure and soil in accordance with State Technical Standards. Use the results to determine application rates for manure, litter and process wastewater.

6.3.1.1.2.1.4 Inspect equipment used for the land application of manure, litter, or process wastewater for leaks prior to application.

6.3.1.1.2.1.5 Implement minimum setback requirements described in §5.1.4.6.1 of these regulations and in accordance with State Technical Standards.

6.3.1.1.2.2 Maintain records specified in §6.3.2.1.2 of these regulations in accordance with State Technical Standards.

6.3.1.2 New Source Performance Standards for Large Dairy Cows and Cattle other than Veal Calves CAFOs. Any new source from Large Dairy Cows and Cattle other than Veal Calves CAFOs must achieve the following performance standard:

6.3.1.2.1 Large Dairy Cows and Cattle other than Veal Calves CAFO Production Areas. Any new source from Large Dairy Cows and Cattle other than Veal Calves CAFOs shall attain limitations and requirements as specified in §6.3.1.1.1 of these regulations.

6.3.1.2.2 Large Dairy Cows and Cattle other than Veal Calves CAFO Land Application Areas. Any new source from Dairy Cows and Cattle other than

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Veal Calves CAFO shall attain limitations and requirements as specified in §6.3.1.1.2 of these regulations.

6.3.2 Recordkeeping Requirements for new and existing Large Dairy Cows and Cattle other than Veal Calves CAFOs.

6.3.2.1 Those owners or operators requiring coverage by these regulations shall maintain records of implementation for six years at the CAFO in accordance with State Technical Standards. All animal waste management plans, nutrient management plans, site-specific management requirements and records of implementation shall be kept by the owners or operators. Animal waste management plans, nutrient management plans and records of implementation shall be made available for inspection and by request of the Secretary.

6.3.2.1.1 Records of implementation in the Production Area of Large Dairy Cows and Cattle other than Veal Calves CAFOs shall include, but are not limited to:

6.3.2.1.1.1 Records indicating mortality management to include number disposed and method of disposal.

6.3.2.1.1.2 Records of manure storage activities, length of storage, amount stored, and maintenance of manure storage facilities.

6.3.2.1.1.3 Records indicating the following routine visual inspections of the CAFO production area were conducted. At a minimum the following must be visually inspected:

6.3.2.1.1.3.1 The CAFO owner or operator shall document any deficiencies and/or necessary corrective actions resulting from the inspections and the date deficiencies were corrected. Deficiencies shall be corrected in 30 days. Deficiencies not corrected in 30 days shall be accompanied by an explanation of the factors preventing immediate correction.

6.3.2.1.1.3.2 Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the wastewater and manure storage containment structure;

6.3.2.1.1.3.3 Daily inspection of water lines, including drinking water or cooling water lines;

6.3.2.1.1.3.4 Weekly inspections and records of depth of the manure, litter, and process wastewater impoundments; the inspection shall note the level in liquid impoundments as indicated by a depth marker.

6.3.2.1.1.3.4.1 All open surface liquid impoundments must have a depth marker which clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of the 25 year – 24 hour rainfall event.

6.3.2.1.1.4 Records of the date, time, and estimated volume of any overflow.

6.3.2.1.1.5 Records documenting the current design of any manure or litter storage structures, including volume for solids accumulation, design treatment volume, total volume design, and approximate number of days of storage.

6.3.2.1.2 Records of implementation in the Land Application Area of Large Dairy Cows and Cattle other than Veal Calves CAFOs shall include, but are not limited to:

6.3.2.1.2.1 Manure, litter, process wastewater and soil test results, methods for testing and analyzing, and recommended nitrogen and phosphorus application rates with an explanation of the basis for determining manure application rates, as provided in the protocols established in the State Technical Standards or the nutrient management plan.

6.3.2.1.2.2 Quantities, analyses and sources of all nitrogen and phosphorus applied to fields.

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6.3.2.1.2.3 Dates, weather conditions at the time of manure, litter or process wastewater land application and 24 hours before and after application, and methods of application(s).

6.3.2.1.2.4 Crops planted, yields, and plant matter (grain, silage, etc.) removed from the land.

6.3.2.1.2.5 Records indicating periodic inspections and maintenance of land application equipment for leaks.

6.3.2.1.3 Off site use of manure, litter or process wastewater

6.3.2.1.3.1 If manure, litter or process wastewater is sold or given to other persons for disposal or utilization, the following information shall be maintained at the CAFO generating the manure, litter or process wastewater:

6.3.2.1.3.1.1 The date of manure, litter or process wastewater removal.

6.3.2.1.3.1.2 Name of receiver and contact information.

6.3.2.1.3.1.3 Quantity (tons/gallons) of manure, litter or process wastewater removed.

6.3.2.1.3.1.4 A copy of the most recent manure, litter and process wastewater nutrient analysis shall be given to the receiver on or before the date of transfer.

6.3.2.1.4 The annual report and supporting documents.  
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6.4.1 Effluent Limits for Large Swine, Poultry and Veal Calves NPDES CAFO Permits

6.4.1.1 Existing Large Swine, Poultry and Veal Calves NPDES CAFOs. Any existing Large Swine, Poultry and Veal Calves CAFOs must achieve the following effluent limits attainable by the application of best practicable control technology currently available (BPT), best conventional pollutant control technology (BCT), or attainable by the application of the best available technology economically achievable (BAT):

6.4.1.1.1 Large Swine, Poultry and Veal Calves NPDES CAFO Production Areas. There shall be no discharge of manure, litter or process wastewater pollutants to Waters of the State from the production area of Large Swine, Poultry and Veal Calves NPDES CAFOs.

6.4.1.1.1.1 The production area for §6.4 of these regulations means that part of an AFO that includes the “animal confinement area”, the “manure storage area”, the raw materials storage area and the “waste containment areas”, egg washing or processing facility and any area used in the storage, handling, treatment or disposal of mortalities. Animal confinement area includes the areas inside the poultry, swine or veal calf confinement houses and end pads in accordance with State Technical Standards. Manure storage and waste containment areas include storage sheds, and stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles.

6.4.1.1.1.2 Whenever precipitation causes an overflow of manure, litter or process wastewater, the overflow may be discharged into Waters of the State if:

6.4.1.1.1.2.1 The production area is designed, constructed, operated, and maintained to contain all manure, litter, and process wastewaters plus the runoff and direct precipitation from a 25-year, 24 hour rainfall event;

6.4.1.1.1.2.2 The production area is operated in accordance with the measures and records required in §5.0 and §6.4.2.1.1 of these regulations.

6.4.1.1.1.3 Voluntary alternative performance standards. Any CAFO owner and operator subject to these regulations may request the Secretary

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to establish, in his or her discretion CAFO NPDES permit effluent limits based on site-specific alternative technologies that achieve a quantity of pollutants discharged from the production area equal to or less than the quantity of pollutants that would be discharged under the baseline performance standards. The CAFO owner and operator requesting alternative performance standards shall provide supporting technical analysis as described in State Technical Standards and other relevant information and data to support such site-specific limitations to the Secretary within the time frame provided. The supporting technical analysis must include calculation of the quantity of pollutants discharged, on a mass basis where appropriate, based on a site specific analysis of a system designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater, including runoff from a 25 year, 24 hour rainfall event. The technical analysis of the discharge of pollutants must include:

6.4.1.1.1.3.1 All daily inputs to the storage system, including manure, litter, all process wastewaters, direct precipitation, and runoff.

6.4.1.1.1.3.2 All daily outputs from the storage system, including losses due to evaporation, sludge removal, and the removal of wastewater for use on cropland at the CAFO or transport off site.

6.4.1.1.1.3.3 A calculation determining the predicted median annual overflow volume based on a 25 year period of actual rainfall data applicable to the site.

6.4.1.1.1.3.4 Site specific pollutant data, including N, P, BOD5, TSS, for the CAFO from representative sampling and analysis of all sources of input to the storage system, or other appropriate pollutant data.

6.4.1.1.1.3.5 Predicted annual average discharge of pollutants, expressed where appropriate as a mass discharge on a daily basis (lbs/day), and calculated considering the requirements in this section.

6.4.1.1.2 Large Swine, Poultry and Veal Calves NPDES CAFO Land Application Areas. Discharges from land application areas from Large Swine, Poultry and Veal Calves NPDES CAFOs are subject to the following requirements:

6.4.1.1.2.1 Develop and implement best management practices in accordance with State Technical Standards, including but not limited to:

6.4.1.1.2.1.1 Nutrient management plan which incorporates a field specific assessment of the potential of nitrogen and phosphorus transport as approved in accordance with State Technical Standards from the field and that addresses the form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals while minimizing nitrogen and phosphorus movement to surface waters.

6.4.1.1.2.1.2 Determine application rates for manure, litter and process wastewater applied to the CAFO to minimize movement of excess nitrogen and phosphorus from the field to surface waters and in accordance with State Technical Standards.

6.4.1.1.2.1.3 Sample and analyze manure and soil in accordance with State Technical Standards. Use the results to determine application rates for manure, litter and process wastewater.

6.4.1.1.2.1.4 Inspect equipment used for the land application of manure, litter, or process wastewater for leaks prior to application.

6.4.1.1.2.1.5 Implement minimum setback requirements described in §5.1.4.6.1 of these regulations and in accordance with State Technical Standards.

6.4.1.1.2.2 Maintain records specified in §6.4.2.1.2 of these regulations and in accordance with State Technical Standards.

6.4.2 New Source Performance Standards for Large Swine, Poultry and Veal Calves CAFOs. Any new source from Large Swine, Poultry and Veal Calves CAFOs must achieve the following performance standard:

6.4.2.1 Large Swine, Poultry and Veal Calves CAFOs Production Areas.

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6.4.2.1.1 There shall be no discharge of manure, litter or process wastewater pollutants into Waters of the State from the production area of Large Swine, Poultry and Veal Calves CAFOs.

6.4.2.1.2 Voluntary alternative performance standards. Any CAFO owner and operator subject to these regulations may request the Secretary to establish, in his or her discretion CAFO NPDES permit effluent limits based on site-specific alternative technologies that achieve a quantity of pollutants discharged from the production area equal to or less than the quantity of pollutants that would be discharged under the baseline performance standards. The CAFO owner and operator requesting alternative performance standards shall provide supporting technical analysis as described in State Technical Standards and other relevant information and data to support such site-specific limitations to the Secretary within the time frame provided. The supporting technical analysis must include calculation of the quantity of pollutants discharged, on a mass basis where appropriate, based on a site specific analysis of a system designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater, including runoff from a 25 year, 24 hour rainfall event. The technical analysis of the discharge of pollutants must include:

6.4.2.1.2.1 All daily inputs to the storage system, including manure, litter, all process wastewaters, direct precipitation, and runoff.

6.4.2.1.2.2 All daily outputs from the storage system, including losses due to evaporation, sludge removal, and the removal of wastewater for use on cropland at the CAFO or transport off site.

6.4.2.1.2.3 A calculation determining the predicted median annual overflow volume based on a 25 year period of actual rainfall data applicable to the site.

6.4.2.1.2.4 Site specific pollutant data, including N, P, BOD5, TSS, for the CAFO from representative sampling and analysis of all sources of input to the storage system, or other appropriate pollutant data.

6.4.2.1.2.5 Predicted annual average discharge of pollutants, expressed where appropriate as a mass discharge on a daily basis (lbs/day), and calculated considering the requirements in this section.

6.4.2.1.3 Maintain records specified in §6.4.2 of these regulations and in accordance with State Technical Standards.

6.4.2.2 Large Swine, Poultry and Veal Calves CAFO Land Application Areas. Any new source from Large Swine, Poultry and Veal Calves CAFOs shall attain limitations and requirements as specified in §6.4.1.1.2 of these regulations.

6.4.3 Recordkeeping Requirements for new and existing Large Swine, Poultry and Veal Calves CAFOs.

6.4.3.1 Those owners or operators requiring coverage by these regulations shall maintain records of implementation for six years at the CAFO in accordance with State Technical Standards. All animal waste management plans, nutrient management plans, site-specific management requirements and records of implementation shall be kept by the owners or operators. Animal waste management plans, nutrient management plans and records of implementation shall be made available for inspection and by request of the Secretary.

6.4.3.1.1 Records of implementation in the Production Area of Large Swine, Poultry and Veal Calves CAFOs shall include, but are not limited to:

6.4.3.1.1.1 Records indicating mortality management to include number disposed and method of disposal.

6.4.3.1.1.2 Records of manure storage activities, length of storage, amount stored, and maintenance of manure storage facilities.

6.4.3.1.1.3 Records indicating the following routine visual inspections of the CAFO production area were conducted for Poultry, Swine or Veal Calf CAFOs utilizing a liquid manure handling system. At a minimum the following must be visually inspected:

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6.4.3.1.1.3.1 The CAFO owner or operator shall document any deficiencies and/or necessary corrective actions resulting from the inspections and the date deficiencies were corrected. Deficiencies shall be corrected in 30 days. Deficiencies not corrected in 30 days shall be accompanied by an explanation of the factors preventing immediate correction.

6.4.3.1.1.3.2 Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the wastewater and manure storage containment structure;

6.4.3.1.1.3.3 Daily inspection of water lines, including drinking water or cooling water lines;

6.4.3.1.1.3.4 Weekly inspections and records of depth of the manure, litter, and process wastewater impoundments; the inspection shall note the level in liquid impoundments as indicated by a depth marker.

6.4.3.1.1.3.4.1 All open surface liquid impoundments must have a depth marker which clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of the 25 year – 24 hour rainfall event.

6.4.3.1.1.4 Records of the date, time, and estimated volume of any overflow.

6.4.3.1.1.5 Records documenting the current design of any manure or litter storage structures, including volume for solids accumulation, design treatment volume, total volume design, and approximate number of days of storage.

6.4.3.1.2 Records of implementation in the Land Application Area of Large Swine, Poultry and Veal Calves CAFOs shall include, but are not limited to:

6.4.3.1.2.1 Manure, litter, process wastewater and soil test results, methods for testing and analyzing, and recommended nitrogen and phosphorus application rates with an explanation of the basis for determining manure application rates, as provided in the protocols established in the State Technical Standards or the nutrient management plan.

6.4.3.1.2.2 Quantities, analyses and sources of all nitrogen and phosphorus applied to fields.

6.4.3.1.2.3 Dates, weather conditions at the time of manure, litter or process wastewater land application and 24 hours before and after application, and methods of application(s).

6.4.3.1.2.4 Crops planted, yields, and plant matter (grain, silage, etc.) removed from the land.

6.4.3.1.2.5 Records indicating periodic inspections and maintenance of land application equipment for leaks.

6.4.3.1.3 Off site use of manure, litter or process wastewater

6.4.3.1.3.1 If manure, litter or process wastewater is sold or given to other persons for disposal or utilization, the following information shall be maintained at the CAFO generating the manure, litter or process wastewater:

6.4.3.1.3.1.1 The date of manure, litter or process wastewater removal.

6.4.3.1.3.1.2 Name of receiver and contact information.

6.4.3.1.3.1.3 Quantity (tons/gallons) of manure, litter or process wastewater removed.

6.4.3.1.3.1.4 A copy of the most recent manure, litter and process wastewater analysis shall be given to the receiver on or before the date of transfer.

6.4.3.1.4 The annual report and supporting documents.

6.5 Terms and Conditions for Duck CAFO NPDES Permits



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6.5.1 Special Definitions: For purposes of this section:

6.5.1.1 “Dry lot” means a facility for growing ducks in confinement with a dry litter floor cover and no access to swimming areas.

6.5.1.2 “Wet lot” means a confinement facility for raising ducks which is open to the environment, has a small number of sheltered areas, and with open water runs and swimming areas to which ducks have free access.

6.5.2 Effluent Limits for Duck CAFOs

6.5.2.1 Existing Large Duck CAFOs. Any existing Large Duck CAFOs must achieve the following effluent limits attainable by the application of best practicable control technology currently available (BPT):

Regulated parameter	Maximum daily <sup>1</sup>	Maximum monthly average <sup>1</sup>	Maximum daily <sup>2</sup>	Maximum monthly average <sup>2</sup>
BOD5 .....	3.66	2.0	1.66	0.91
Fecal coliform .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup>Pounds per 1000 ducks

<sup>2</sup> Kilograms per 1000 ducks

<sup>3</sup> Not to exceed MPN of 400 per 100 ml at any time.

6.5.3 New Source Performance Standards for Duck CAFOs. Any new source must achieve the following performance standard:

6.5.3.1 There shall be no discharge of manure, litter or process wastewater pollutants into Waters of the State from the production area.

6.5.3.2 Whenever rainfall events cause an overflow of process wastewater from a facility designed, constructed, operated, and maintained to contain all process-generated wastewaters plus the runoff from a 25 year, 24 hour rainfall event at the location of the CAFO, any process wastewater pollutants in the overflow may be discharged into Waters of the State.

6.5.3.3 Pretreatment Standards for New Sources of Duck CAFOs.

6.5.3.3.1 Any new source from Duck CAFOs must achieve the following performance standard: There shall be no introduction of process wastewater pollutants to publically owned treatment works (POTW).

6.5.3.3.2 Whenever rainfall events cause an overflow of process wastewater from a facility designed, constructed, operated, and maintained to contain all process-generated wastewaters plus the runoff from a 25 year, 24 hour rainfall event at the location of the CAFO, any process wastewater pollutants in the overflow may be introduced to publically owned treatment works.

6.6 Terms and Conditions for all Medium and Designated CAFO NPDES Permits

6.6.1 Nutrient Management Plans or Animal Waste Management Plans

6.6.1.1 Requirement to Implement a Site Specific Nutrient Management Plan or Animal Waste Management Plan. Any NPDES CAFO permit issued to a Medium or Designated CAFO owner or operator shall require the CAFO owner or operator to implement and fully comply with a nutrient management plan or animal waste management plan developed by a Delaware certified nutrient consultant as described in §5.0 of these regulations that contains site specific best management practices necessary to meet the requirements of this paragraph and standards specified in these regulations.

6.6.2 Record Keeping for all Medium and Designated CAFOs

6.6.2.1 Those owners or operators requiring a NPDES CAFO permit in accordance with these regulations shall maintain records of implementation for six years at the CAFO, in accordance with State Technical Standards. All animal waste management plans,

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nutrient management plans, site-specific management requirements and records of implementation shall be kept by the owners or operators. Animal waste management plans, nutrient management plans and records of implementation shall be made available for inspection and by request of the Secretary.

6.6.2.1.1 Records of implementation in the Production Area of Medium and Designated CAFOs shall include, but are not limited to:

6.6.2.1.1.1 Records indicating mortality management to include number disposed and method of disposal.

6.6.2.1.1.2 Records of manure storage activities, length of storage, amount stored, and maintenance of manure storage facilities.

6.6.2.1.1.3 The CAFO owner or operator shall document any deficiencies found within the production area and/or necessary corrective actions resulting from any inspections conducted and the date deficiencies were corrected. Deficiencies shall be corrected in 30 days. Deficiencies not corrected in 30 days shall be accompanied by an explanation of the factors preventing immediate correction.

6.6.2.1.2 Records of implementation in the Land Application Area of Medium and Designated CAFOs shall include, but are not limited to:

6.6.2.1.2.1 Manure, litter, process wastewater and soil test results, methods for testing and analyzing, and recommended nutrient application rates with an explanation of the basis for determining manure application rates, as provided in the protocols established in the State Technical Standards or the nutrient management plan.

6.6.2.1.2.2 Quantities, analyses and sources of all nitrogen and phosphorus applied to fields.

6.6.2.1.2.3 Dates, weather conditions at the time of manure, litter or process wastewater land application and 24 hours before and after application, and methods of application(s).

6.6.2.1.2.4 Crops planted, yields, and plant matter (grain, silage, etc.) removed from the land.

6.6.2.1.2.5 Records indicating periodic inspections and maintenance of land application equipment for leaks.

6.6.2.1.2.5.1 The CAFO owner or operator shall document any deficiencies found within the land application area and/or necessary corrective actions resulting from any inspections conducted and the date deficiencies were corrected. Deficiencies shall be corrected in 30 days. Deficiencies not corrected in 30 days shall be accompanied by an explanation of the factors preventing immediate correction.

6.6.2.1.3 Off site use of manure, litter or process wastewater. If manure, litter or process wastewater is sold or given to other persons for disposal or utilization, the following information shall be maintained at the CAFO generating the manure, litter or process wastewater:

6.6.2.1.3.1 The date of manure, litter or process wastewater removal.

6.6.2.1.3.2 Name of receiver and contact information.

6.6.2.1.3.3 Quantity (tons/gallons) of manure, litter or process wastewater removed.

6.6.2.1.3.4 A copy of the most recent manure, litter and process wastewater analysis shall be given to the receiver on or before the date of transfer.

6.6.2.1.4 The annual report and supporting documents.

**7.0 Criteria for Siting New CAFO Facilities.**

7.1 New CAFOs not permitted prior to the effective date of these regulations shall meet the following criteria:

7.1.1 New Source Siting Determination

7.1.1.1 Scope

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7.1.1.1.1 Except as otherwise provided in an applicable “New Source Performance State Technical Standard”, a source is a “new source” if meets the definition of a new source as provide in these regulations; and

7.1.1.1.2 It is constructed at the site at which no other source is located;

7.1.1.1.3 It totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

7.1.1.1.4 Its processes are substantially independent of an existing source at the same site. In determining whether these processes are substantially independent; the Secretary shall consider such factors as the extent to which the new facility is integrated with the existing CAFO; and the extent to which the new facility is engaged in the same general type of activity as the existing source.

7.1.1.1.4.1 In the event that an unforeseen circumstance, such as a natural or man-made disaster, has partially or completely destroyed a NPDES CAFO permitted facility or structure, the owner or operator of that NPDES CAFO permitted operation may request in writing a determination by the Secretary that replacement of that partially or completely destroyed facility or structure is not a “new source”. The Secretary may approve such determinations on a case by case basis considering the unique facts of each request and event. In addition, such determination must be requested and approved in writing before construction commences.

7.1.1.2 A source meeting the requirements to determine a new source as listed above in this section is a new source only if a new source performance standard has been approved in the State Technical Standards. If there is no such standard, the source is a new discharger.

7.1.1.3 Construction at a site at which an existing source is located results in a modification to the NPDES CAFO permit rather than a new source or a new discharger if the construction does not create a new building except where the Secretary has made an alternate determination as described in §7.1.1.1.4.1 of these regulations, structure, facility, or installation meeting the criteria of this section but otherwise alters, replaces, or adds to existing process or production equipment.

7.1.1.4 Construction of a new source has commenced if the owner or operator has:

7.1.1.4.1 Begun, or caused to begin as part of a continuous onsite construction program,

7.1.1.4.2 Any placement, assembly, or installation of facilities or equipment; or

7.1.1.4.3 Significant site preparation work including clearing, excavation, or removal of existing building, structures or existing facilities which is necessary for the placement, assembly or installation of new source facilities or equipment; or

7.1.1.4.4 Entered into a binding contractual obligation for the purchase of facilities or equipment which is intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss and contracts for feasibility engineering, and design studies do not constitute a contractual obligation under the paragraph.

**7.2 Siting of New Control Facilities.**

7.2.1 Waste storage structures shall not be located in the 100-year flood plain unless the CAFO is designed and constructed such that the manure from a CAFO is protected from floodwaters from a storm of 24 hours duration having a one (1) percent chance of recurrence within a given year. Such events are defined as 100-year, 24-hour rainfall event. Waste storage structures and treatment lagoons are to be designed in accordance with State Technical Standards.

7.2.2 Waste storage structures shall not be located closer than 300 feet from any public water well nor 200 feet from a domestic water well.

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7.2.3 No Waters of the State shall come into direct contact with the animals confined at the CAFO. Fences or other practices may be used to restrict such access in accordance with State Technical Standards.

7.2.4 Animal confinement areas shall not be located:

7.2.4.1 In the 100 year flood plain unless the animal confinement areas are protected from inundation and damage that may occur during that flood event.

7.2.4.2 Closer than 300 feet from any public water well, nor 200 feet from a domestic water well.

7.2.5 The handling, treatment, and management of CAFO wastes shall not:

7.2.5.1 Result in the inadvertent destruction or adverse modification of habitat that supports federally endangered or threatened species.

7.2.5.2 Create a public health hazard.

7.2.5.3 Result in groundwater contamination.

**8.0 Public Access to Information, Public Notice for NOIs and Draft NPDES CAFO Permits, Public Comments, Public Hearings for NOIs and NPDES CAFO Permits**

8.1 Public Access to Information.

8.1.1 All information pertaining to NPDES CAFO permit issuance, reissuance, modification, revocation or termination, including NOIs, attachments, comments received by the public, and draft NPDES CAFO permits shall be available for review by the public.

8.1.2 Annual reports, including without limitation a statement by the owner or operator stating whether or not the owner or operator met or exceeded the projected crop yields provided in CAFO's nutrient management plan, shall be available for review by the public, provided that the crop yields provided and contained in annual reports shall be confidential and non-public to the maximum extent permitted under Delaware law. The crop yields provided and contained in annual reports may be used for data compilation in an aggregated form, and such data compilation in an aggregated form may be made public. Information transmitted by the Secretary to EPA shall be subject to appropriate Federal regulations.

8.2 Public Notice for NOIs

8.2.1 The Department shall follow the following procedures in accordance with 7 Del. C. §6004 (b) when processing an NOI for a CAFO NPDES permit.

8.2.1.1 Every complete NOI for a CAFO NPDES permit, including any request for NPDES CAFO permit modification, revocation, and reissuance or termination, shall be given public notice by publication on the State of Delaware website, and in a newspaper of general circulation in the county, city or town in which the CAFO is located and in a daily newspaper of general circulation throughout the state.

8.2.1.1.1 Notice shall be provided when the tentative determinations have been made and a draft NPDES CAFO permit prepared.

8.2.1.1.2 A copy of the notice shall be mailed to the applicant, and any person or group who has asked to be notified. The Secretary will maintain a mailing list of persons and groups who will be sent copies of notices for all NPDES NOIs. The Secretary will add the name of any person or group to that list upon written request.

8.2.1.1.3 Public notice is not required when a request for NPDES CAFO permit modification, revocation, reissuance, or termination is denied. The Secretary will provide written notice of such decision to the person who filed the request.

8.2.1.2 The contents of the public notice of any NOI shall include the following minimum information:

8.2.1.2.1 Name and address of the owner or operator and the name of the CAFO submitting the NOI;

8.2.1.2.2 A brief description of the CAFO described in the NOI;

8.2.1.2.3 The type of discharge or proposed discharge, the name of the receiving water and general description of the location of each discharge point indicating whether such discharge or proposed discharge is new or existing;

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8.2.1.2.4 A statement indicating the Secretary's intent to issue a CAFO NPDES permit for the discharges or proposed discharges described in the NOI;

8.2.1.2.5 A brief description of the procedures by which the public may participate in the final NPDES CAFO permit decision, including the timeframe for providing comments, a description of the procedure for requesting a hearing or if the Secretary has determined to hold a public hearing, the date and time for such hearing; and

8.2.1.2.6 The location at which the NOI, CAFO nutrient management plan or animal waste management plan, and terms of the NPDES CAFO permit may be inspected;

8.2.1.2.7 Address and phone number of the Department office at which interested persons may obtain further information.

8.2.1.3 The owner or operator may be responsible for the cost of any such advertisements and notices made by the Department as required by these regulations, not to exceed \$500.

8.2.1.4 Public notices may describe more than one NOI or NPDES CAFO permit.

8.2.1.5 The Secretary shall provide a period of not less than 30 days following the date of public notice during which time interested parties may submit their written views on the draft NPDES CAFO permit made with respect to the NOI. All written comments submitted during the comment period will be retained by the Department and considered in the formulation of its final determination with respect to the NOI.

### 8.3 Public Comments.

8.3.1 All persons, including the owner or operator, who believe any condition in the draft NPDES CAFO permit is inappropriate or that the Secretary's tentative decision to deny the application, terminate the NPDES CAFO permit, or prepare a draft NPDES CAFO permit is inappropriate, must raise the issues and submit all arguments supporting their position by the close of the public comment period.

8.3.2 The Secretary shall consider all comments when preparing the final NPDES CAFO permit and shall provide a response to all comments received during the public notice period.

8.3.2.1 The Secretary shall ensure, to a reasonable extent, that the comments on any draft NPDES CAFO permits have been addressed.

8.3.2.2 The Secretary shall prepare a written response, indicating which provisions of the draft NPDES CAFO permit have been changed in the final NPDES CAFO permit, and the reason for the change, or if the requested change is not made, the reason for denying the change.

8.3.2.3 Responses shall be available to the public, at the time the notice of a final NPDES CAFO permit decision is given.

8.3.3 At his discretion, the Secretary may reopen or extend the comment period to give interested persons the opportunity to comment on any provisions in the draft NPDES CAFO permit that were modified or on additional conditions that were to be included in response to the data, information, or arguments presented during the initial comment period. Comments filed during such reopened or extended comment period shall be limited to those new or modified provisions. The public notice shall define the scope of the reopening or extension of the comment period.

### 8.4 Public Hearings

8.4.1 The Secretary will hold a public hearing on an NOI in accordance with 7 Del. C. §6006 if he receives a meritorious request for a hearing during the public comment period. A public hearing may be held on any NOI if the Secretary determines it to be in the best interest of the State to do so. Such notice shall also be sent by mail to any person who has requested such notification from the Department by providing their name and mailing address. The reasonable time stated shall be 15 days, unless federal law requires a longer time, in which case the longer time shall be stated. A public hearing request shall be deemed meritorious if it exhibits

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a familiarity with the application and a reasoned statement of the NPDES CAFO permit's probable impact.

8.4.2 Public Notice of Hearings

8.4.2.1 Public notice of any hearing shall be circulated as follows:

8.4.2.1.1 Notice of public hearings shall be published on a State of Delaware website, in a newspaper of general circulation in the county or city where the CAFO is located and in a daily newspaper of general circulation throughout the state;

8.4.2.1.2 Notice of the hearing shall be sent to all persons and government agencies which received a copy of the notice for the NOI;

8.4.2.1.3 Notice of the hearing shall be sent to all persons who requested the hearing and/or provided comments.

8.4.2.2 In addition to the requirements in §8.2.1.2 of these regulations, the public hearing notice shall include the following:

8.4.2.2.1 A brief reference to the public notice issued for the NOI, including date of issuance unless the public notice includes the hearing notice;

8.4.2.2.2 Information regarding the date, time and location of the hearing;

8.4.2.2.3 The purpose of the hearing;

8.4.2.2.4 A concise statement of the issues raised by the persons requesting the hearing;

8.4.2.2.5 A brief reference to the rules and procedures to be followed at the hearing.

8.5 NPDES CAFO Permit Issuance

8.5.1 After the close of the public comment period, the Secretary shall consider all comments received including any additional data, information or arguments presented during the public comment period and render a final NPDES CAFO permit decision. For the purposes of these regulations, a final NPDES CAFO permit decision means a final decision to issue, deny, modify, revoke, reissue, or terminate a NPDES CAFO permit.

8.5.2 The Secretary shall notify the CAFO owner and operator and each person who submitted comments or requested notice of the final NPDES CAFO permit decision. The notice shall include the Secretary's response to comments and a reference for appealing the Secretary's decision.

8.5.3 Effective date of NPDES CAFO permit

8.5.3.1 NPDES CAFO permit coverage under these regulations begins upon approval by the Secretary.

8.6 Changes to a nutrient management plan.

8.6.1 The CAFO owner or operator shall provide the Secretary with the most current version of the CAFO's nutrient management plan or animal waste management plan and shall identify changes from the previous version, except that the results of calculations made in accordance with the narrative rate approach are not subject to the requirements of this section.

8.6.2 The Secretary will review the revised nutrient management plan or animal waste management plan to ensure that it meets the requirements of these regulations and applicable effluent limitations and standards, as described in the State Technical Standards, and will determine whether the changes to the incorporated nutrient management plan or animal waste management plan require revision to the terms of the NPDES CAFO permit issued to the CAFO.

8.6.2.1 If revision to the terms of the incorporated nutrient management plan is not necessary, the Secretary will notify the CAFO owner or operator and upon such notification the owner or operator may implement the revised nutrient management plan.

8.6.2.2 If revision to the terms of the incorporated nutrient management plan is necessary, the Secretary will determine whether such changes are substantial changes.

8.6.2.2.1 Substantial Changes. A substantial change to the NPDES CAFO permit will be determined by the Secretary. Changes determined to be substantial are subject to public review and comment as specified in sections 8.2 and 8.3 of these

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regulations. The Secretary may incorporate the changes to the incorporated nutrient management plan or animal waste management plan into the NPDES CAFO permit, and will notify the owner or operator and the public of the final decision concerning revisions to the terms and conditions of the NPDES CAFO permit. Substantial changes include, but are not be limited to the following changes:

- 8.6.2.2.1.1 Addition of new land application areas not included under the terms of a CAFO nutrient management plan incorporated into an existing CAFO NPDES permit and in full compliance with the requirements of these regulations;
    - 8.6.2.2.1.1.1 If the new CAFO owner or operator applies manure, litter or process wastewater on the newly acquired land application area in accordance with existing NPDES CAFO permit terms applicable to the newly acquired application areas, such addition would be a change to the new CAFO owner or operator's nutrient management plan but would not be a substantial change for purposes of these regulations;
  - 8.6.2.2.1.2 Changes to the site specific components of the nutrient management plan where changes will increase the risk of nitrogen or phosphorus transport to Waters of the State;
  - 8.6.2.2.1.3 Changes to the crop specific maximum annual manure application rates, total nitrogen rates or plant available phosphorus rates;
  - 8.6.2.2.1.4. Addition of the animal feeding capacity greater than 25%;
  - 8.6.2.2.1.5 Addition of any crop or other uses not included in the terms of the CAFO's nutrient management plan and corresponding rates of application; or
  - 8.6.2.2.1.6 Any change to the operation that presents a risk of nitrogen and phosphorus runoff as determined by the Secretary.
- 8.6.2.2 2 Insubstantial Changes. If the Secretary determines that the revisions to the terms of the incorporated nutrient management plan submitted by the owner or operator are not substantial, the Secretary will make the revised nutrient management plan publicly available and include the revisions in the NPDES CAFO permit record, revise the terms of the incorporated nutrient management plan in the NPDES CAFO permit, notify the owner or operator and inform the public of any changes to the terms of the incorporated nutrient management plan in the NPDES CAFO permit.

**9.0 Enforcement, Fines, and Penalties**

9.1 Whoever violates these regulations shall be subject to the fines and penalties established in 3 Del. C. §2200 and 7 Del. C. Ch. 60 at the discretion of the Secretary and appropriate Court.

9.2 Any person wishing to file a complaint against any person regarding an alleged violation of these regulations shall follow the process established by *Regulations Governing the Processing of Complaints and Violations published in the January 1, 2001 Register of Regulations*.

**10.0 Effective Date**

10.1 These regulations shall become effective November 11, 2011.