

## PROPOSED NPDES PERMIT FACT SHEET

### NPDES General Permit No. OKG010000

#### U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 6

National Pollutant Discharge Elimination System (NPDES) General Permit for Concentrated Animal Feeding Operations (CAFO)

**AGENCY:** U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 6

**ACTION:** Issuance of a Draft NPDES General Permit for CAFOs

#### SUMMARY:

EPA Region 6 is proposing to reissue General NPDES Permit No. OKG010000 for discharges from concentrated animal feeding operations (CAFOs) in Oklahoma (except Indian Country). This permit was originally issued in the Federal Register at 58 FR 7610 with an effective date of March 10, 1993, and an expiration date of March 10, 1998. The applicable requirements from that 1993 permit are continued in the current proposal to reissue. The current proposal adds additional requirements contained in revised CAFO regulations at 40 CFR 122 and 412 which were published in the Federal Register at 73 FR 70,418 on November 20, 2008.

#### ADDRESSES:

Comments on this proposed permit should be sent to Ms. Diane Smith, EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202-2733, telephone (214) 665-2145, e-mail [smith.diane@epa.gov](mailto:smith.diane@epa.gov). The proposed general permit and this Fact Sheet can be found on the Internet at <http://www.epa.gov/region6/water/index.htm>.

#### GENERAL STATUTORY AND REGULATORY INFORMATION

Section 301(a) of the Clean Water Act (CWA), 33 USC 1311(a), prohibits the discharge of pollutants to waters of the U.S. in the absence of authorizing permits, including NPDES permits. The CWA Section 402, 33 USC 1342, authorizes EPA to issue NPDES permits allowing such discharges on condition that they in part will comply with requirements implementing CWA Sections 301, 304, and 401 [33 USC 1311, 1314, and 1341].

Among those requirements are effluent limitations reflecting levels of technological capability, water quality standards, and other more stringent requirements States may adopt. Violation of a condition contained in an NPDES permit, whether an individual or general permit, is a violation of the CWA and subjects the operator of the permitted facility to the penalties specified in Section 309 of the Act.

Under the CWA, the Permitting Authority may issue general permits to regulate numerous facilities which have similar discharges and are subject to the same conditions and limitations within a specified geographic area [40 CFR 122.28]. Using general permits conserves resources and reduces the paperwork burden associated with obtaining discharge authorization for the regulated community.

EPA has determined that a general permit is the appropriate mechanism to address the majority of CAFOs that are subject to the requirements of the NPDES program and the CWA.

## **NPDES GENERAL PERMIT FOR CAFO - FACT SHEET**

Supplementary information in this Fact Sheet is organized as follows:

- I. Permit Area and Coverage
- II. Effluent Limitations and Standards
- III. Special Conditions
- IV. Discharge Monitoring and Notification Requirements
- V. Annual Report
- VI. Standard Permit Conditions
- VII. Other Legal Requirements

### **I. PERMIT AREA AND COVERAGE**

#### **A. Permit Area**

This permit offers NPDES permit coverage for discharges from operations defined as concentrated animal feeding operations (CAFOs) in the State of Oklahoma (except Indian Country).

#### **B. Permit Coverage**

This permit provides coverage for any eligible operation that discharges or proposes to discharge and which meets the definition of a Large CAFO at 40 CFR 122.23(b)(4), is subject to effluent limitations guidelines at 40 CFR 412 Subparts A (Horses and Sheep), C (Dairy Cows and Cattle Other than Veal Calves), and D (Swine, Poultry, and Veal Calves), and that is located in the permit coverage area.

CAFOs are point sources subject to the NPDES permitting program. A permit is required for any CAFO that discharges or proposes to discharge pollutants to waters of the U.S. [40 CFR Part 122.21(a) and 122.23(d)(1)]. A CAFO proposes to discharge if it is designed, constructed, operated or maintained such that a discharge will occur.

#### **C. Eligibility for Coverage**

The proposed permit has been developed to fulfill the NPDES general permit coverage requirements of 40 CFR 122.28(a).

Eligible CAFOs may apply for authorization under the terms and conditions of this permit, by submitting a notice of intent (NOI) to be covered by this permit.

CAFO owners/operators may also seek to be excluded from coverage under this permit by (1) submitting to the Director (see Part I.E.4) a notice of termination form (see Appendix C) or (2) by applying for an individual NPDES Permit in accordance with Part I.F.

## **D. Limitations on Coverage**

In accordance with 40 CFR 122.28(a)(4)(ii), the general permit may exclude specified sources or areas from coverage. Part I.D of the proposed permit describes CAFOs that are not eligible for coverage under this NPDES general permit, and must apply for an individual permit if seeking permit coverage. Parts I.D.1 and I.D.2 have been included in the permit in accordance with 40 CFR Part 122.28(b)(3). Part I.D.3 excludes duck CAFOs. EPA is currently not aware of any such facilities in the permit coverage area and believes that if any such facilities are identified that due to the low number of such facilities in the area covered by the proposed permit that individual permit coverage would be more appropriate for such CAFOs. Part I.D.4 excludes any new source subject to 40 CFR Part 412, Subpart D (Swine, Poultry, and Veal Calves). EPA believes that the New Source Performance Standards for such CAFOs could be more appropriately addressed in individual permits. Restrictions on coverage for CAFOs that do not fulfill the Endangered Species Act (Part I.D.5) and/or the National Historic Preservation Act (Part I.D.6) were contained in the previous CAFO general permit. Part I.D.7 has been included in the permit in accordance with 40 CFR 131.13(a)(3), and the Oklahoma Water Quality Standards [785:45-3-2] and [785:46-13]. The Oklahoma Water Quality Standards cited in Part I.D.7 may be accessed at <http://www.owrb.ok.gov/quality/standards/standards.php>. Part I.D.8 is based on 40 CFR 122.4(i), which prohibits issuing a NPDES permit to a new discharger if it will cause or contribute to a water quality standards violation. Part I.D.9 has been included in the permit in accordance with 40 CFR 412. In Part I.D.10, CAFOs located on Indian lands in Oklahoma are excluded from general permit coverage, and would require an individual permit if coverage is sought.

## **E. Application for Coverage**

In accordance with 40 CFR Parts 122.21(i)(1)(x) and 122.28(b)(2), operators of CAFOs seeking coverage under this general permit must submit a notice of intent (NOI) and a nutrient management plan (NMP) to EPA.

CAFOs seeking permit coverage may either submit the NOI electronically or by mail. Applicants submitting their NOI electronically shall do so using an electronic version of NPDES Form 2B Application (see CAFO General Permit Appendix A) via the EPA Region 6 website (see <http://www.epa.gov/region6/water/index.htm>), in accordance with 40 CFR 122.21(a)(2)(ii). CAFOs that submit a NOI electronically will receive an electronic notification of receipt from the EPA. This notice must be signed and submitted by mail to the EPA prior to EPA making a determination of NOI completeness, in order to fulfill the signature requirements of 40 CFR 122.22.

Applicants submitting their NOI by mail shall submit a signed copy of NPDES Form 2B Application (see CAFO General Permit Appendix A or [http://www.epa.gov/npdes/pubs/cafo\\_fedrgstr\\_form2b.pdf](http://www.epa.gov/npdes/pubs/cafo_fedrgstr_form2b.pdf)) to EPA.

Upon receipt, EPA will review the NOI and NMP to ensure that all permit requirements are fulfilled. EPA may request additional information from the CAFO owner or operator if additional information is necessary to complete the NOI and NMP or clarify, modify, or supplement previously submitted material. If EPA makes a preliminary determination that the NOI is complete, the NOI, NMP and draft terms of the NMP to be incorporated into the permit will be made available at EPA Region 6's website at <http://www.epa.gov/region6/water/index.htm> for a 30-day public review and comment period. EPA will respond to comments received during this period and, if necessary, require the CAFO owner or operator to revise the nutrient management plan. At the end of this process the applicant will be granted coverage under this general permit only upon written notification by EPA. If EPA determines that the facility cannot be covered under this general permit, the facility shall apply for an individual permit.

The method used in the current proposed permit for implementing 40 CFR Part 6 (Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act) is the same as that used in the expired permit. Specifically, New Source CAFOs must submit a Finding of No Significant Impact or an Environmental Impact Statement issued by EPA Region 6 along with a Notice of Intent in order to seek coverage by the general permit.

For an existing CAFO, the proposed permit clarifies the procedure to be used for permit coverage of a significant expansion that is constructed after the effective date of the permit. A significant expansion of a CAFO is defined as one large enough to be considered a New Source. A new Source determination is made by taking into account the definition of a New Source (40 CFR 122.2) and the criteria for New Source Determination (40 CFR 122.29(a) and (b)). If EPA determines the expansion to be a New Source, then the permittee must include a Finding of No Significant Impact or an Environmental Impact Statement issued by EPA Region 6 along with their Notice of Intent to have the expansion covered by the permit.

#### **F. Requiring an Individual Permit**

In accordance with 40 CFR Part 122.28(b)(3)(i), EPA may determine that providing coverage under a general permit is inappropriate for a particular CAFO and may require such a facility to apply for an individual NPDES permit.

#### **G. Continuation of this Permit**

In accordance with 40 CFR Part 122.46(a), this permit has a term of five years from the effective date. If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with 40 CFR 122.6 and section I.G of the permit and will remain in force and effect.

## II. RATIONALE FOR EFFLUENT LIMITATIONS AND STANDARDS

### A. Effluent Limitations

Section 301 of the CWA prohibits the discharge of pollutants by any point source into waters of the U.S. except in accordance with a permit. It also requires that dischargers comply with effluent limitations necessary to meet State water quality standards. The NPDES permit regulations at 40 CFR 122.44(a) and (d) implement Section 301 by requiring that each NPDES permit issued under Section 402 include conditions that meet technology-based effluent limitations and standards, as well as water quality standards and State requirements.

#### 1. Technology-based Effluent Limitations

Large CAFOs are subject to the effluent guidelines found at 40 CFR Part 412.

Pursuant to the Clean Water Act (the “Act”) Section 402(a)(2) [40 CFR 122.44(k)(3)], best management practices (BMPs) are being proposed in the draft permit. These practices are reasonably necessary either to achieve effluent limitations or to carry out the Act’s goals of eliminating the discharge of pollutants as much as practicable and to maintain water quality

##### a. Technology-based Effluent Limitations and Standards – Production Area

The proposed permit has been developed to fulfill the NPDES general permit coverage requirements of 40 CFR 122.42(e)(1)(i), 412.31 and 412.43.

Part II.A.1.a (Effluent Limitations) is based on 40 CFR 412 for Large CAFOs and best professional judgement for other CAFOs. It was contained in the previous general permit requirements and, therefore, also based on 40 CFR 122.44(l) which requires limits in a reissued permit to be at least as stringent as limits in the previous permit. The minimum storage design specifications in II.A.1 are based on EPA’s CAFO technical guidance document “Managing Manure Nutrients at Concentrated Animal Feeding Operations” December 2004, Chapter 2, Section B.1.

##### b. Additional measures and records

The production area of the CAFO must fulfill the requirements of Part II.A.1.B of the proposed permit and 40 CFR 412.37(a) and (b).

#### 2. Additional Requirements – Applicable to the Production Area

Large CAFOs are subject to the effluent guidelines found at 40 CFR Part 412. Other requirements of this section (Parts II.A.2.a(viii)-(xi)) were contained in the previous permit and are retained in the draft permit, consistent with 40 CFR 122.44(l).

- a. This section of the proposed permit includes additional requirements that are applicable to the production area of the CAFO. The basis for these requirements is explained below.
- i. Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the wastewater and manure storage and containment structures. [40 CFR 412.37(a)(1)(i)]
- ii. Daily inspections of all water lines, including drinking water and cooling water lines. [40 CFR 412.37(a)(1)(ii)]
- iii. Installation of a depth marker in all open surface liquid impoundments which clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour rainfall event. [40 CFR 412.37(a)(2)]

The proposed permit also requires that the depth marker shall be visible from the top of the levee. This requirement was included in the previous permit.

- iv. Weekly inspections of the manure, litter, and process wastewater impoundments noting the level as indicated by the depth marker installed in accordance with 40 CFR 412.37(a)(2). [40 CFR 412.37(a)(1)(iii)]
- v. Correction of any deficiencies that are identified as a result of visual inspections as soon as possible. [40 CFR 412.37(a)(3)]
- vi. No disposal of animal mortalities in any liquid manure or process wastewater systems and handling of animal mortalities in such a way as to prevent discharge of pollutants to surface water. [40 CFR 412.37(a)(4)].

The requirement to properly dispose of dead animals within 3 days, unless otherwise provided for by the Director, was included in the previous permit.

- vii. Maintenance of complete records for the production area, in accordance with 40 CFR 412.37(b). Records must be maintained on-site at the permitted CAFO for five years from the date they are created and must include the records identified in the Operation and Maintenance section of Table IV-A of the permit.

#### b. Prohibitions

The prohibitions included in Part IIA.2.b were contained in the previous permit and are retained in the proposed permit.

### **3. Water Quality-based Effluent Limitations and Standards – Production Area**

Federal regulations [40 CFR 122.44(d)] require permit limitations to control all pollutants which may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard. A state-wide general permit must assure that water quality standards will not be violated by authorized discharges from any facility covered by that permit, including CAFOs located on small upstream tributaries. A general permit's water quality-based requirements must, therefore, be sufficiently protective to ensure that no authorized discharges anywhere in the State will violate water quality standards. EPA may impose additional water quality-based limitations on a site-specific basis, or require the facility to obtain coverage under an individual permit, if information in your NOI, required reports, or from other sources indicates that your discharges are not controlled as necessary to meet applicable water quality standards.

In those cases where technology-based effluent limitations are not sufficient to meet water quality standards, and where an analysis of frequency, duration and magnitude of the anticipated discharge (consisting of potential overflows of manure, litter, or process wastewater) indicates the reasonable potential to violate applicable water quality standards the permitting authority must develop more stringent water quality-based effluent limitations on a site-specific basis. NPDES permits for CAFOs may include BMPs as water quality-based effluent limitations or use BMPs that are reasonably necessary to meet water quality-based effluent limitations [40 CFR 122.44(k)].

In addition these requirements may apply to instances where the CAFO discharges to 303(d) listed (impaired) water bodies and the discharge contains pollutants for which the waterbody is listed. For CAFO operations this may include but is not limited to nutrients, oxygen demanding substances or bacteria. Examples of this include discharges to water quality impaired waters, discharges to water designated by the State as Tier 2 or 2.5, or excessive chronic discharges.

CAFOs that discharge or propose to discharge to an impaired water will be informed by the EPA if any additional limits or controls are necessary to protect water quality. For impaired waters with an EPA approved or established TMDL, additional requirements will be consistent with the assumptions of any available wasteload allocation in the TMDL. For impaired waters without an EPA approved or established TMDL, additional requirements will be consistent with water quality standards. Coverage under an individual permit may be required in accordance with Part I.D.1 of the proposed permit. Any additional limits or controls shall be included in the NMP.

CAFOs that discharge or propose to discharge to an impaired water must implement and maintain any control measures or conditions on their site that enabled the CAFO to become eligible for coverage under Part I.D.7 of the proposed permit, and shall include these control measures or conditions in its NMP.

If the CAFO discharges or proposes to discharge directly to waters within the boundaries of areas listed in Table 1 of Appendix B of Oklahoma Water Quality Standards [785:45] (National and State Parks, National Forests, Wildlife Areas, Wildlife Management Areas, and Wildlife Refuges), EPA may notify the facility that additional analyses, control measures, or other permit conditions are necessary to ensure that the recreational and ecological significance of these

waters will be maintained, or notify you that an individual permit application is necessary in accordance with Part.I.D.1. Any such additional requirements shall be included in the NMP. The Oklahoma Water Quality Standards may be accessed at <http://www.owrb.ok.gov/quality/standards/standards.php>.

In order to address the potential for frequent discharges from a facility and to address water quality protection from storm events smaller than the 25-year, 24-hour storm event, EPA has developed a water quality-based reduction plan requirement. This requirement is not triggered by discharges due to storms larger than the 25-year, 24-hour storm event, but rather discharges caused by a series of smaller storms. If discharges occur as a result of storm events smaller than the 25-year, 24-hour storm event more than once in three (3) years, the discharger must prepare a plan to minimize the frequency of discharges caused by such chronic rainfall events. The plan, which may consist of operational, maintenance, and/or structural modifications, must be developed within six (6) months and implemented within one (1) year after the discharge event triggering action under this section. This requirement is based on the water quality standard exceedance frequency for aquatic life for the development of acute numeric standards (acute criteria), which is described in 40 CFR 131.36(c)(2)(ii).

If at any time the facility becomes aware, or EPA determines, that any discharge causes or contributes to an exceedance of applicable water quality standards, the facility must take corrective action as required in Part III.A.3 of the proposed permit.

#### **4. Technology-based Effluent Limitations and Standards – Land Application Areas under the Control of the CAFO Owner/Operator**

The CAFO must develop and implement a nutrient management plan. [40 CFR 412.4(c)(1)]

This section is based upon the following regulatory requirements:

- a. Develop and implement a nutrient management plan that is based on a field-specific assessment of the potential for nitrogen and phosphorus transport from the field. [40 CFR 412.4(c)(1)]
- b. Address 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. [40 CFR 412.4(c)(1)]
- c. Determine application rates for manure, litter, and process wastewater that minimize phosphorus and nitrogen transport from the field to surface waters in accordance with the most current Oklahoma NRCS Conservation Practice Standard Code 590 (Nutrient Management), which has been adopted by the Director as the technical standard for nutrient management. [40 CFR 412.4(c)(2)]

- d. In addition to the above technology-based effluent limitations for the land application areas, EPA has established BPJ requirements for identification of site specific conservation practices to control runoff of pollutants to waters of the U.S. [40 CFR 122.42(e)(1)(vi)]
- e. Establishment of protocols to land apply manure, litter, and process wastewater in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater. [40 CFR 122.42(e)(1)(vii)]
- f. Analyze manure a minimum of once annually for nitrogen and phosphorus content and soil a minimum of once every five years for phosphorus content. [40 CFR 412.4(c)(3)]
- g. Periodically inspect for leaks equipment used for land application of manure, litter, or process wastewater. [40 CFR 412.4(c)(4)]
- h. Do not apply manure, litter, or process wastewater closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or other conduits to surface waters. As a compliance alternative, the CAFO may substitute the 100-foot setback with a 35-foot wide vegetated buffer where applications of manure, litter, or process wastewater are prohibited. As a compliance alternative, the permittee may also demonstrate that a set-back or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions that would be achieved by the 100-foot setback. [40 CFR 412.4(c)(5)]
- i. Complete on-site records including the site specific NMP must be maintained to document implementation of all required land application practices. [40 CFR 412.37(b)]

**5. Other Limitations for Land Application Areas under the Control of the CAFO Owner/Operator**

- a. Additional BMPs to control discharges from land application areas. The requirements of this section were contained in the previous permit and are retained in the draft permit, consistent with 40 CFR 122.44(l).
- b. Prohibitions
  - (i) There shall be no discharge of manure, litter or process wastewater to a water of the United States from a CAFO as a result of the application of manure, litter or process wastewater to land areas under the control of the CAFO, except where it is an agricultural storm water discharge. [40 CFR 122.23(e)]
  - (ii) Waste shall not be applied to land when the ground is frozen, saturated with water, or during rainfall events. This requirement was contained in the previous permit and is retained in the draft permit, consistent with 40 CFR 122.44(l).

c. Water Quality-Based Effluent Limitations.

Discharges from CAFO land application areas, except where it is an agricultural storm water discharge, are subject to NPDES requirements, including water quality-based effluent limitations. Federal regulations [40 CFR 122.44(d)] require permit limitations to control all pollutants which may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard. In most instances, a CAFO that meets technology-based permit limits requiring manure to be applied at appropriate agronomic rates will eliminate all or most dry weather discharges. However, if such discharges remain, the Permitting Authority must determine the need for additional water quality-based effluent limitations to meet applicable water quality standards based on the circumstances of each particular case (see the Preamble to the Final Rule, 73 FR 70,418 (November 20, 2008)). A state-wide general permit must ensure that water quality standards will not be violated by authorized discharges from any facility covered by that permit, including CAFOs located on small upstream tributaries. A general permit's water quality-based requirements must, therefore, be sufficiently protective to ensure that no authorized discharges anywhere in the State will violate water quality standards (see Water Quality-based Effluent Limitations and Standards – Production Area, above).

EPA has determined that water quality-based effluent limitations are necessary to address dry weather discharges from land application areas that cause or contribute to an excursion above Oklahoma Water Quality Standards. The proposed permit prohibits all dry weather discharge from the land application area. This includes, but is not limited to, the dry weather discharge of irrigation water not associated with nutrient application on fields where manure was previously applied.

## **6. Effluent Limitations - Other Discharges**

a. Other production area discharges

Permit limitations are based on best professional judgment (BPJ) when national effluent limitations guidelines that apply to the appropriate category, or to the particular process involved, have not been issued. EPA can use BPJ to develop special permit conditions to address specific discharges at CAFOs, such as washdown of equipment that has been in contact with manure, discharges of fuel, and pollutants (i.e., manure, feathers, and feed) which have fallen to the ground immediately downwind from confinement building exhaust ducts and ventilation fans and are carried by storm water runoff to waters of the U.S. (see Section 4.1.1 of EPA's December 31, 2003, NPDES Permit Writers' Guidance Manual and Example NPDES Permit for CAFOs).

Discharges from CAFOs, including process wastewater discharges from outside the production area, non-process wastewater discharges, and storm water discharges not addressed under the ELG, except where they are considered an agricultural storm water discharge, are subject to NPDES requirements, including water quality-based effluent limitations. EPA has determined that water quality-based effluent limitations are necessary to address the following discharges that may cause or contribute to an excursion above Oklahoma Water Quality Standards.

Process wastewater discharges from outside the production area, including: washdown of equipment that has been in contact with manure, raw materials, products or byproducts that occurs outside of the production area; runoff of pollutants from raw materials, products or byproducts (such as manure, feathers, litter, bedding and feed) from the CAFO that have been spilled or otherwise deposited outside the production area that have the potential to contribute pollutants to waters of the U.S. shall be identified in the NMP. The NMP shall identify measures necessary to ensure that applicable water quality standards are not exceeded.

Wastewater discharges that do not meet the definition of process wastewater, including: discharges associated with feed, fuel, chemical, or oil spills, equipment repair, and equipment cleaning where the equipment has not been in contact with manure, raw materials, products or byproducts; domestic wastewater discharges and have potential to contribute pollutants to waters of the U.S. shall be identified in the NMP. The NMP shall identify measures necessary to ensure that water quality standards are not exceeded.

Storm water discharges that are not addressed under the effluent limitations in Part II above remain subject to applicable industrial or construction storm water discharge requirements.

## **B. Other Legal Requirements**

No condition of this permit releases the permittee from any responsibility or requirements under other statutes or regulations, Federal, State/Tribal, or local [40 CFR Parts 122.1(f) and 122.49]

### III.SPECIAL CONDITIONS

#### A. Nutrient Management Plan (NMP)

1. Schedule. CAFOs seeking coverage under this permit must submit the completed NMP to EPA along with the NOI. The permittee shall implement its NMP as soon as possible and modify as necessary upon authorization under this permit in accordance with 40 CFR 122.23(h).

#### 2. NMP Review and Terms

Each permittee must develop, submit with its NOI, and implement a site specific NMP. The NMP must specifically identify and describe the practices that will be implemented to assure compliance with the effluent limitations and special conditions in this CAFO general permit. The NMP must be developed in accordance with the Oklahoma NRCS Conservation Practice Standard Code 590 (Nutrient Management). As provided in 40 CFR 123.36, these technical standards must be consistent with 412.4(c)(2), which in part provides that such standards must operate to minimize the transport of nutrients to surface waters. The nutrient management plan accomplishes this primarily by restricting the quantity of nutrients that can be land applied and matching that quantity with the nutrient needs of the crops being grown on the fields used for such land application. [40 CFR 122.23(h)]

Upon receipt of the NMP, the Director will review the NMP. The Director can request additional information if needed. The Director will use the NMP to identify site-specific permit terms, which must be incorporated as terms and conditions of the permit. [40 CFR 122.23(h)]

Once the NOI and NMP are complete and have been reviewed by the Director, the Director will notify the public of his or her proposal to grant coverage under the general permit. The Director will publish the notice of intent submitted by the CAFO, including the CAFO's NMP, and the terms of the NMP to be incorporated into the permit, as determined by the Director, at the EPA Region 6, Water Quality Protection Division internet site (<http://www.epa.gov/region6/water/index.htm>). The notice will also provide the opportunity for the request for a public hearing on the NOI and draft NMP in accordance with 40 CFR 124.11 and 12. The public is provided 30 days to comment and request a hearing on the proposed terms of the NMP to be incorporated into the permit. The Director will respond to significant comments and can revise the NMP or terms of the permit if necessary. [40 CFR 122.23(h)]

The Director will notify the CAFO owner or operator that coverage under the general permit has been authorized and of the applicable terms and conditions of the permit. These site specific permit terms will be provided to the permittee in a written permit authorization notice. When the Director authorizes the CAFO owner or operator to discharge under the general permit, the terms of the NMP must be incorporated as terms and conditions of the permit for the CAFO. [40 CFR 122.23(h)]

#### 3. NMP Content

The proposed general permit specifies that each NMP must, at a minimum, include practices and procedures necessary to implement the applicable effluent limitations and standards. In addition, each NMP must meet measures required under 40 CFR 122.42(e)(1)(i-ix), and specified in the general permit. (Note: EPA has addressed mortality management [40 CFR 122.42(e)(1)(ii)] and direct contact of confined animals with waters of the U.S. [40 CFR 122.23(1)(iv)] in Part II.A of the proposed permit and therefore does not require the NMP to address these requirements.) These requirements include the following:

- a. Ensure adequate storage of manure, litter, and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities. [40 CFR 122.42(e)(1)(i)]
- b. Ensure that clean water is diverted, as appropriate, from the production area. [40 CFR 122.42(e)(1)(iii)]
- c. Ensure that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals or contaminants. [40 CFR 122.23(1)(v)]
- d. Identify appropriate site specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, to control runoff of pollutants to waters of the United States and specifically, to minimize the runoff of nitrogen and phosphorus. [40 CFR 122.23(1)(vi)] The requirement to identify areas that have a high potential for significant erosion and measures to limit erosion and pollutant runoff was included in the previous permit.
- e. Identify protocols for appropriate testing of manure, litter, process wastewater, and soil. [40 CFR 122.23(1)(vii)]
- f. Establish protocols to land apply manure, litter, or process wastewater in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater. [40 CFR 122.23(1)(viii)]
- g. Application rates may be expressed in NMPs consistent with one of the two approaches described in (i) and (ii) below:
  - (i) **Linear Approach.** An approach that expresses rates of application as pounds of nitrogen and phosphorus, according to the following specifications:
    - (A) The terms include maximum application rates from manure, litter, and process wastewater for each year of permit coverage, for each crop identified in the nutrient management plan, in chemical forms determined to be acceptable to the Director, in pounds per acre, per year, for each field to be used for land application, and certain factors necessary to determine such rates. At a minimum, the factors that are terms must include: the outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field,

the crops to be planted in each field or any other uses of a field such as a pasture or fallow fields; the realistic yield goal for each crop or use identified for each field; the nitrogen and phosphorus recommendation from EPA approved sources (see below) for each crop or use identified for each field, credits for all nitrogen in the field that will be plant available; consideration of multi-year phosphorus application; and accounting for all other additions of plant available nitrogen and phosphorus to the field. In addition, the terms include the form and source of manure, litter, and process wastewater to be land-applied; the timing and method of land application, and 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 applied.

EPA approved sources for nitrogen and phosphorus crop recommendations include the Oklahoma NRCS, Oklahoma State University, or an equivalent source.

(B) 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, and process wastewater tests for nitrogen and phosphorus taken within 12 months of the date of land application; [40 CFR 122.42(e)(5)(i)]

(ii) Narrative Rate Approach

The “narrative rate approach” expresses the field-specific rate of application as a narrative rate prescribing how to calculate the amount of manure, litter, and process wastewater allowed to be applied. This approach results in the amount, in tons or gallons, of manure, litter, and process wastewater to be land applied according to the following specifications:

(A) The terms include 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 to the Director, in pounds per acre, for each field, and certain factors necessary to determine such amounts. At a minimum, the factors that are terms must include: the outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field; the crops to be planted in each field or any other uses such as pasture or fallow fields (including alternative crops identified in accordance with paragraph (ii)(B) of this section); the realistic yield goal for each crop or use identified for each field, and the nitrogen and phosphorus recommendations from EPA approved sources (see below) for each crop or use identified for each field. In addition, the terms 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: results of soil tests conducted in accordance with protocols identified in the nutrient management plan, credits for all nitrogen in the field that will be plant available; the amount of nitrogen and phosphorus in the manure, litter and process wastewater to be applied;

consideration of multi-year phosphorus application; accounting for all other additions of plant available nitrogen and phosphorus to the field, the form and source of manure, litter, and process wastewater; the timing and method of land application; and volatilization of nitrogen and mineralization of organic nitrogen.

EPA approved sources for nitrogen and phosphorus crop recommendations include the Oklahoma NRCS, Oklahoma State University, or an equivalent source.

- (B) The terms of the nutrient management plan include alternative crops identified in the CAFO's nutrient management plan that are not in the planned 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 Director 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 (ii)(A) of this section.
- (C) For CAFOs using this approach the following projections must be included in the nutrient management plan submitted to the Director, but are not terms of the nutrient management plan: the CAFO's planned crop rotations for each field for the period of permit coverage, the projected amount of manure, litter, or process wastewater to be applied; projected credits for all nitrogen in the field that will be plant available; consideration of multi-year phosphorus application: accounting for all other additions of plant available nitrogen and phosphorus to the field; and the predicted form, source, and method of application of manure, litter, and process wastewater for each crop. 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.
- (D) CAFOs that use this 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 paragraph (ii)(A) of this section before land applying manure, litter, and process wastewater and must rely on the following data;
  - (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 in paragraph (ii)(A) of this section, and for phosphorus, the result of the most recent soil test conducted in accordance with soil testing requirements approved by the Director; and
  - (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. [122.42(e)(5)(ii)]

EPA Region 6 has determined that the Manure Management Planner (see <http://www.agry.purdue.edu/mmp>) is an acceptable process for developing a narrative rate approach in Oklahoma.

- (iii) Identify and maintain all records necessary to document the development and implementation of the NMP and compliance with the permit. [40 CFR 122.42(e)(5)(ix)]
- 4. Signature. The NMP shall be signed by the owner/operator or other signatory authority in accordance with Part VI.E (Signatory Requirements) of this permit. [40 CFR 122.41(k)]
- 5. A current copy of the NMP shall be kept on-site at the permitted facility in accordance with Part IV.C of this permit and provided to the permitting authority upon request. [40 CFR 412.37(c)]
- 6. Changes to the NMP
  - a. The general permit recognizes that a CAFO owner or operator may need to make changes to its NMP. When a CAFO owner or operator covered by this general permit makes changes to the CAFO's NMP previously submitted to the Director, the CAFO owner or operator must provide the Director with the most current version of the CAFO's NMP and identify changes from the previous version. [40 CFR 122.42(e)(6)(i)]
  - b. The Director will review the revised NMP. If the Director determines that the changes to the NMP require revision of the terms of the NMP incorporated into the permit issued to the CAFO, the Director must then determine whether such changes are substantial. [40 CFR 122.42(e)(6)(ii)] Substantial changes to the terms of a NMP incorporated as terms and conditions of a permit include, but are not limited to: [40 CFR 122.42(e)(6)(iii)]
    - (i) Addition of new land application areas not previously included in the CAFO's NMP, except that if the added land application area is covered by the terms of a NMP incorporated into an existing NPDES permit and the permittee complies with such terms when applying manure, litter, and process wastewater to the added land; [40 CFR 122.42(e)(6)(iii)(A)]
    - (ii) For NMPs using the Linear Approach, changes to the field-specific maximum annual rates of land application (pounds of N and P from manure, litter, and process wastewater). For NMPs using the Narrative Rate Approach, changes to the maximum amounts of nitrogen and phosphorus derived from all sources for each crop; [40 CFR 122.42(e)(6)(iii)(B)]
    - (iii) Addition of any crop or other uses not included in the terms of the CAFO's NMP; and [40 CFR 122.42(e)(6)(iii)(C)]
    - (iv) Changes to site specific components of the CAFO's NMP, where such changes are likely to increase the risk of nitrogen and phosphorus transport to waters of the U.S. [40 CFR 122.42(e)(6)(iii)(D)]

- c. If the changes to the terms of the NMP are not substantial, the Director will include the revised NMP in the permit record, revise the terms of the permit based on the site specific NMP, and notify the permittee and the public of any changes to the terms of the permit based on revisions to the NMP. [40 CFR 122.42(e)(6)(ii)(A)]
- d. If the Director determines that the changes to the terms of the NMP are substantial, the Director will notify the public, make the proposed changes and make the information submitted by the CAFO owner or operator available for public review and comment, and respond to all significant comments received during the comment period. The Director may require the permittee to further revise the NMP, if necessary. Once the Director incorporates the revised terms of the NMP into the permit, the Director will notify the permittee of the revised terms and conditions of the permit. [40 CFR 122.42(e)(6)(ii)(B)]

7. Requirements associated with nutrient management plan implementation

- a. Permittee must have adequate storage of manure, litter, and process wastewater. [40 CFR 122.42(e)(1)(i)]
- b. Clean water must be diverted. [40 CFR 122.42(e)(1)(iii)]
- c. Chemicals and other contaminants handled on-site may not be disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants. [40 CFR 122.42(e)(1)(v)]
- d. Manure, litter and process wastewater testing. [40 CFR 122.42(e)(1)(vii)]
- e. Soil testing. [40 CFR 122.42(e)(1)(vii)]
- f. CAFOs using the Narrative Approach. [40 CFR 122.42(e)(5)]

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8. Certified Specialists to Develop NMPs. EPA promotes and supports the use of certified specialists to develop or modify NMPs, which will help to ensure the quality of NMPs. EPA encourages CAFO owners/operators to use these certified specialists to prepare their NMPs. Although a certified specialist may be used, CAFO owners/operators are solely responsible for assuring their NMPs comply with all permit conditions and are properly implemented.

**B. Facility Closure**

Abandoned or improperly closed CAFOs pose a pollution threat to surface water and groundwater that can be significant for large facilities and increases due to a lack of proper maintenance and management. Part III.B of the General Permit addresses requirements for closure of containment basins and other manure handling and wastewater facilities. These requirements are contained in the example CAFO permit contained in Appendix J in EPA’s December 31, 2003, NPDES Permit Writers’ Guidance Manual and Example NPDES Permit for

CAFOs. It should be noted that the Oklahoma NRCS also has closure plan requirements. Where possible, EPA has made efforts, such that any plan developed under one of these other requirements would meet the requirements established in the EPA CAFO General Permit. The permittee is responsible for assuring that all applicable requirements are met.

The CAFO general permit includes specific closure requirements for lagoons and other surface impoundments, as well as for other manure, litter and process wastewater storage and handling facilities. Under the general permit, no such facilities may be abandoned and each must be properly closed as promptly as practicable upon ceasing operation. In addition, any lagoon or other earthen or synthetic lined basin that is not in use for a period of twelve consecutive months must be properly closed unless the facility is financially viable, intends to resume use of the structure at a later date, and either: (1) maintains the structure as though it were actively in use, to prevent compromise of structural integrity; or (2) removes manure and wastewater to a depth of one foot or less and refills the structure with clean water to preserve the integrity of the synthetic or earthen liner. In either case, the permittee must notify EPA of the action taken, and must conduct routine inspections, maintenance, and record keeping as though the structure were in use. Prior to restoration of use of the structure, the permittee shall notify EPA and provide the opportunity for inspection.

All closure of lagoons and other earthen or synthetic lined basins must be consistent with Oklahoma NRCS Conservation Practice Standard Code 360 (Closure of Waste Impoundments). Consistent with this standard the permittee must remove all waste materials to the maximum extent practicable and dispose of them in accordance with the permittee's nutrient management plan, unless otherwise authorized by EPA.

Closure of all other manure, litter, or process wastewater storage and handling structures must occur as promptly as practicable after the permittee has ceased to operate, or, if the permittee has not ceased to operate, within 12 months after the date on which the use of the structure ceased. To close a manure, litter, or process wastewater storage and handling structure, the permittee must remove all manure, litter, or process wastewater and dispose of it in accordance with the permittee's nutrient management plan, or document its transfer from the permitted facility in accordance with off-site transfer requirements specified in Part III.C of the proposed permit, unless otherwise authorized by the EPA. [40 CFR 122.23(h)]

### **C. Requirements for the Transfer of Manure, Litter, and Process Wastewater to Other Persons**

Under the CAFO general permit, where CAFO-generated manure, litter, or process wastewater is sold or given away the permittee must comply with specific requirements that document the transaction and promote proper management. These requirements are based on 40 CFR 122.42(e)(3) and the expired permit. These include the following conditions:

- a. The permittee must maintain records showing the date and amount of manure, litter, and/or process wastewater that leaves the permitted operation;
- b. The permittee must maintain records of the name and address of the recipient;

- c. The permittee must provide the recipient(s) with representative information on the nutrient content of the manure, litter, and/or process wastewater; and
- d. These records must be retained on-site, for a period of five years, and be submitted to the permitting authority upon request.

The CAFO general permit does not establish requirements for off-site management of CAFO generated manure, litter, or process wastewater. However, the Director can use the documentation specified above to ensure proper management of such materials as appropriate.

#### **D. Additional Special Conditions**

The proposed permit requirements in Part III.D, except for Part III.D.8, were contained in the expired permit and are being continued in the current proposal in accordance with 40 CFR 122.44(1).

Part III.D.8 of the proposed permit will contain requirements to address the protection of endangered or threatened species in the permit area. EPA and the U.S. Fish & Wildlife Service (FWS) are engaged in informal consultation on the permit under Section 7(a)(2) of the Endangered Species Act (ESA). FWS has suggested that three circumstances might adversely affect listed species and/or designated critical habitat and EPA has included conditions in the draft permit addressing these concerns.

First, the draft permit requires that CAFOs that discharge or propose to discharge to areas of concern develop and implement an Emergency Action Plan (EAP). The EAP should include reasoned procedures to be implemented in the event of a release or spill at a facility that might reach and subsequently harm listed threatened and endangered species or designated critical habitat. The goal of the EAP is to prevent to the extent possible any spills or releases from migrating off the site. An EAP is a required element of the NRCS CNMP and EPA's draft permit provision requires that the same EAP be submitted to EPA for review as an element of the NMP.

The minimum requirements for an EAP include:

- Phone numbers for fire, ambulance, law enforcement, spill recovery, spill reporting, and farm personnel.
- A description of recovery equipment and where it is located.
- An action plan for fire, personal injury, spills from the containment structure, spills during pumping, and spills during transport.

Additionally, the EAP may identify the BMP(s) that should be implemented immediately to minimize the likelihood of an accident, leak, spill or permitted discharge from entering waters of the U.S. occupied by threatened or endangered species or their critical habitat. BMPs developed and implemented must adhere with state law. Suggested BMP(s) to reach this goal may include, but are not limited to:

- an emergency runoff discharge abatement area;
- a storage lagoon or other lined storage area with additional capacity;
- a contingency plan to immediately pump out and create additional storage (avoiding land application where pumped material runoff might reach off into receiving stream);
- additional constructed wetland or other adequate waste treatment units; or
- other watershed practices that are capable of reducing discharges from reaching waters of the U.S. that are occupied by threatened or endangered species (e.g., facility setbacks, berms, filter strips, emergency response barriers, etc.).

The second concern identified in informal consultation addresses the need to minimize the potential for spills from wastewater transportation systems from reaching waters either designated as critical habitat or where there is a known presence of listed threatened or endangered species (identified as “Area of Concern” in Appendix D of the permit). The draft permit requires that CAFOs implement emergency cut-off systems for any wastewater conveyance lines that are operated by a pump and have a surficial hydrologic connection to waters in any of the areas of concern. The permit also requires that any newly installed wastewater conveyance lines must be designed and installed in accordance with the Oklahoma NRCS Conservation Practice Standard Codes 430 (Irrigation Water Conveyance, Pipeline) and 634 (Manure Transfer).

The third concern identified in informal consultation arises from trace elements in manure, including selenium, copper, and zinc that often are added to animal feed and may thus concentrate to levels to become potential pollutants of concern in land applied lagoon sludge. EPA has utilized its Sample Farm model to estimate metals loadings (USEPA, 2002) and notes that manure applied to land at nitrogen-based application rates meets or exceeds annual urban loadings of zinc and copper. The draft permit requires that CAFO operators implement sludge testing prior to land application. Data obtained from such sampling can be utilized by the CAFO operator to avoid overapplication of metals to land application sites and may be utilized by EPA for development of permit conditions during the next permit reissuance.

Additionally, it is emphasized that the CAFO operator shall ensure that nutrient characterization of process waste shall be representative of the material to be land applied. For example, if a lagoon is agitated to produce a slurry for land application, the lagoon shall be agitated to produce the slurry for characterization purposes. Further, if sludge is allowed to accumulate in the lagoon and is removed periodically rather than agitated and pumped via a slurry, the operator shall perform nutrient characterization of the sludge prior to land application.

EPA’s consultation with FWS is currently incomplete and the draft permit requirements may be altered or deleted as a result of further consultation. Public comment is invited on both requirements.

#### **IV. DISCHARGE MONITORING AND NOTIFICATION REQUIREMENTS**

### **A. Notification of Discharges Resulting from Manure, Litter, and Process Wastewater Storage, Handling, On-site Transport and Application**

The general permit provides that in the event of a discharge of pollutants to a water of the United States, the permittee is required to make immediate oral notification within 24-hours to the EPA Region 6, Compliance and Assurance Division, Water Enforcement Branch (6EN-W), Dallas, Texas at 214-665-6595, and notify EPA and ODEQ in writing within fourteen (14) working days of the discharge from the facility. In addition, the permittee must keep a copy of the notification submitted to EPA together with the other records required by this permit. The discharge notification must include: 1) A description of the discharge and its cause, including a description of the flow path to the receiving water body and an estimate of the flow and volume discharged; and 2) The period of non-compliance, including exact dates and times, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate and prevent recurrence of the discharge. This reporting requirement is a standard permit condition under 40 CFR 122.41(l)(6). Note that runoff that meets the criteria of the agricultural stormwater exemption does not constitute a point source discharge.

### **B. Monitoring Requirements for All Discharges from Retention Structures**

The CAFO general permit provides that in the event of any overflow or other discharge of pollutants from a manure and/or wastewater storage or retention structure, whether or not authorized by this permit, all discharges must be sampled and analyzed, and an estimate of the volume of the release and the date and time must be recorded. [40 CFR 122.41(j)]

Samples must, at a minimum, be analyzed for the following parameters: total nitrogen, nitrate nitrogen, ammonia nitrogen, total phosphorus, *E. coli* bacteria, five-day biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids, pH, and temperature. The discharge must be analyzed in accordance with approved EPA methods for water analysis listed in 40 CFR Part 136. [40 CFR 122.41]

The expired Region 6 CAFO general permit required monitoring for ammonia nitrogen, fecal coliform bacteria, five-day biochemical oxygen demand (BOD<sub>5</sub>), and total suspended solids (TSS). All of these pollutants, with the exception of fecal coliform bacteria, are retained in the proposed permit. Oklahoma Water Quality Standards allow for the use of *E. coli* in lieu of Fecal coliform bacteria. EPA has replaced fecal coliform bacteria with *E. coli* bacteria. Total phosphorus, nitrate nitrogen, and total nitrogen have been added to the proposed permit to address high levels of nutrients in wastewater contained in CAFO retention structures and their potential to impact water quality. Temperature and pH have been added to this monitoring requirement to recognize the influence of these parameters on ammonia nitrogen toxicity.

If conditions are not safe for sampling, the permittee must provide documentation of why samples could not be collected and analyzed. For example, the permittee may be unable to collect samples during dangerous weather conditions (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.). However, once dangerous conditions have passed, the permittee shall collect a sample from the retention structure (pond or lagoon) from which the discharge occurred. [40 CFR 122.41]

### C. General Inspection, Monitoring, and Record keeping Requirements

Under the general permit, the permittee shall inspect, monitor, and record the results of such inspection and monitoring in accordance with Table IV–A:

<b>Table IV-A NPDES Large CAFO Permit Record Keeping Requirements</b>		
<b>Parameter</b>	<b>Units</b>	<b>Frequency</b>
<b>Permit and Nutrient Management Plan</b> <i>(Note: Required by the NPDES CAFO Regulation – applicable to all CAFOs)</i>		
The CAFO must maintain on-site a copy of the current NPDES permit, including [SPECIFY MECHANISM TO IDENTIFY SITE SPECIFIC TERMS].	N/A	Maintain at all times
The CAFO must maintain on-site a current site specific NMP that reflects existing operational characteristics. The operation must also maintain on-site all necessary records to document that the NMP is being properly implemented with respect to manure and wastewater generation, storage and handling, and land application. In addition records must be maintained that the development and implementation of the NMP is in accordance with the minimum practices defined in 40 CFR 122.42(e).	N/A	Maintain at all times
<b>Soil and Manure/Wastewater Nutrient Analysis</b> <i>(Note: Required by the CAFO ELG – applicable to Large CAFOs)</i>		
Analysis of manure, litter, and process wastewater to determine nitrogen and phosphorus content. <sup>1</sup>	ppm Pounds/ton	At least annually after initial sampling
Analysis of soil in all fields where land application activities are conducted to determine phosphorus content. <sup>1</sup>	ppm	At least once every 5 years after initial sampling
<b>Operation and Maintenance</b> <i>(Note: Required by the CAFO ELG – applicable to Large CAFOs)</i>		
Visual inspection of all water lines	N/A	Daily <sup>2</sup>
Documentation of depth of manure and process wastewater in all liquid impoundments	Feet	Weekly
Documentation of all corrective actions taken. Deficiencies not corrected within 30 days must be accompanied by an explanation of the factors preventing immediate correction.	N/A	As necessary
Documentation of animal mortality handling practices	N/A	As necessary
Design documentation for all manure, litter, and wastewater storage structures including the following information: <ul style="list-style-type: none"> <li>• Volume for solids accumulation</li> <li>• Design treatment volume</li> <li>• Total design storage volume<sup>3</sup></li> <li>• Days of storage capacity</li> </ul>	Cubic yards/gallons Cubic yards/gallons Cubic yards/gallons Days	Once in the permit term unless revised

<b>Table IV-A NPDES Large CAFO Permit Record Keeping Requirements</b>		
<b>Parameter</b>	<b>Units</b>	<b>Frequency</b>
Documentation of all overflows from all manure and wastewater storage structures including: <i>(Note: Required by the NPDES Regulation – applicable to all CAFOs)</i>		
<ul style="list-style-type: none"> <li>Date and time of overflow</li> </ul>	Month/day/year	Per event
<ul style="list-style-type: none"> <li>Estimated volume of overflow</li> </ul>	Total gallons	Per event
<ul style="list-style-type: none"> <li>Analysis of overflow (as required by the Permitting Authority)</li> </ul>	ppm	Per event
<b>Land Application</b> <i>(Note: Required by the CAFO ELG – applicable to Large CAFOs)</i>		
For each application event where manure, litter, or process wastewater is applied, documentation of the following by field:		
<ul style="list-style-type: none"> <li>Date of application</li> </ul>	Month/day/year	Daily
<ul style="list-style-type: none"> <li>Method of application</li> </ul>	N/A	Daily
<ul style="list-style-type: none"> <li>Weather conditions at the time of application and for 24 hours prior to and following application</li> </ul>	N/A	Daily
<ul style="list-style-type: none"> <li>Total amount of nitrogen and phosphorus applied<sup>4</sup></li> </ul>	Pounds/acre	Daily
Documentation of the crop and expected yield for each field	Bushel/acre	Seasonally
Documentation of the actual crop planted and actual yield for each field		
Documentation of test methods and sampling protocols used to sample and analyze manure, litter, and wastewater and soil.	N/A	Once in the permit term unless revised
Documentation of the basis for the application rates used for each field where manure, litter, or wastewater is applied.	N/A	Once in the permit term unless revised
Documentation showing the total nitrogen and phosphorus to be applied to each field including nutrients from the application of manure, litter, and wastewater and other sources	Pounds/acre	Once in the permit term unless revised
Documentation of manure application equipment inspection	N/A	Seasonally
<b>Manure Transfer</b> <i>(Note: Required by the NPDES CAFO Regulation – applicable to Large CAFOs)</i>		
For all manure transfers the CAFO must maintain the following records:		
<ul style="list-style-type: none"> <li>Date of transfer</li> </ul>	N/A	As necessary
<ul style="list-style-type: none"> <li>Name and address of recipient</li> </ul>	N/A	As necessary
<ul style="list-style-type: none"> <li>Approximate amount of manure, litter, or wastewater transferred</li> </ul>	Tons/gallons	As necessary
<sup>1</sup> Refer to the state nutrient management technical standard for the specific analyses to be used. <sup>2</sup> Visual inspections should take place daily during the course of normal operations. The completion of such inspection should be documented in a manner appropriate to the operation. Some operations may wish to maintain a daily log. Other operations may choose to make a weekly entry, when they update other weekly records, that required daily inspections have been completed. <sup>3</sup> Total design volume includes normal precipitation less evaporation on the surface of the structure for the storage period, normal runoff from the production area for the storage period, 25-year, 24-hour precipitation on the surface of the structure, 25-year, 24-hour runoff from the production area, and residual solids. <sup>4</sup> Including quantity/volume of manure, litter, or process wastewater applied and the basis for the rate of phosphorus application.		

[40 CFR 122.42(e)(2) and (3); 40 CFR 412.37(b) and (c)]

## V. ANNUAL REPORTING

Under the general permit, the permittee must submit an annual report to EPA and ODEQ. The first annual report shall be submitted on the 28<sup>th</sup> day of the 12<sup>th</sup> month after the permittee's NOI was submitted for coverage under this general permit, and every 12 months, thereafter. The requirement and criteria for the annual report are specified in 40 CFR 122.42(e)(4).

The annual report must include the following information:

- a. The number and type of animals, whether in open confinement or housed under roof;
- b. Estimated amount of total manure, litter and process wastewater generated by the CAFO in the previous 12 months (tons/gallons);
- c. Estimated amount of total manure, litter and process wastewater transferred to other person by the CAFO in the previous 12 months (tons/gallons);
- d. Total number of acres for land application covered by the NMP;
- e. Total number of acres under control of the CAFO that were used for land application of manure, litter and process wastewater in the previous 12 months;
- f. Summary of all manure, litter and process wastewater discharges from the production area that have occurred in the previous 12 months, including date, time, and approximate volume;
- g. A statement indicating whether the current version of the CAFO's NMP was developed or approved by a certified nutrient management planner;
- h. Actual crops planted and actual yields for each field for the preceding 12 months;
- i. Results of all samples of manure, litter or process wastewater for nitrogen and phosphorus content for manure, litter and process wastewater that was land applied;
- j. Results of calculations conducted in accordance with Parts III.A.3.h.i(B) (for the Linear Approach) and III.A.3.h.ii(C) (for the Narrative Rate Approach);
- k. Amount of manure, litter, and process wastewater applied to each field during the preceding 12 months, and;
- l. For CAFOs using the Narrative Rate Approach to address rates of application:
  - The results of any soil testing for nitrogen and phosphorus conducted during the preceding 12 months.
  - The data used in calculations conducted in accordance with Part III.A.3.h.ii(C).
  - The amount of any supplemental fertilizer applied during the preceding 12 months.

## **VI. STANDARD CONDITIONS**

This NPDES General Permit for CAFOs incorporates the standard conditions applicable to all permits issued under the NPDES program. These conditions consist of: general conditions, proper operation and maintenance, monitoring and records, reporting requirements, signatory requirements, certification, availability of reports, and penalties for violations of permit conditions. Additional information on each of these standard permit conditions is contained in Section VI of the general permit [40 CFR Part 122.41].

EPA would like to note that permit requirement 10.e has been added to Part VI.A of the permit. This provision is based on Part III(I)(v) of the expired CAFO permit, which stated that if a properly operated facility, which was in danger of imminent overflow due to chronic or catastrophic rainfall, could discharge wastewater to land application sites for filtering prior to discharging to waters of the U.S.