

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
**AGENDA ITEM REQUEST**  
for General Permit Adoption

AGENDA REQUESTED: June 26, 2019

DATE OF REQUEST: June 7, 2019

INDIVIDUAL TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF  
NEEDED: Paige Bond, (512) 239-2141

**CAPTION: Docket No. 2019 – 0156 - MIS.** Consideration of the adoption of an amendment with renewal of the Concentrated Animal Feeding Operations (CAFO) General Permit, TXG920000, which authorizes manure, sludge, and wastewater discharge into or adjacent to water in the state only during chronic or catastrophic rainfall or catastrophic conditions by CAFOs. Public notice of the proposed general permit was published in the February 22, 2019, issue of the *Texas Register* (44 TexReg 901). (Joy Alabi, Michael Parr) (Non-Rule Project No. 2018-015-OTH-NR).

**L'Oreal W. Stepney, P.E.**  
\_\_\_\_\_  
Deputy Director

**David W. Galindo**  
\_\_\_\_\_  
Division Director

**Paige Bond**  
\_\_\_\_\_  
Agenda Coordinator

# Texas Commission on Environmental Quality

## Interoffice Memorandum

**To:** Commissioners **Date:** June 7, 2019

**Thru:** Bridget C. Bohac, Chief Clerk  
Toby Baker, Executive Director

**From:** L'Oreal W. Stepney, P.E., Deputy Director  
Office of Water

**Subject:** General Permit: Approval for Adoption  
General Permit No. TXG920000 for Concentrated Animal Feeding  
Operations  
Project Number: 2018-015-OTH-NR

### **Summary and background:**

This is a renewal with amendment of a Texas Pollutant Discharge Elimination System (TPDES)/State general permit (GP) authorizing Concentrated Animal Feeding Operations (CAFOs) in the state. The draft permit will replace the current permit which expires on July 20, 2019.

### **Basic requirements:**

#### **A. Applicability:**

The permit provides coverage for both TPDES and State-only CAFOs. TPDES CAFOs are CAFO facilities that meet the head count for a large CAFO by species under the definition in 30 TAC Chapter 321, Subchapter B and the GP. State-only CAFOs are CAFO facilities that meet the headcount for a medium CAFO, and are in certain counties (Bosque, Comanche, Erath, Hamilton, Hopkins, Johnson, Rains, and Wood collectively referred to as the dairy outreach program area) of the state.

#### **B. Permit Requirements:**

During chronic or catastrophic rainfall or catastrophic conditions, a discharge to surface water in the state may occur and is authorized from a CAFO that is properly designed, constructed, operated and maintained under the provisions of this GP. Manure, sludge, and wastewater generated by a CAFO must be retained and used in an appropriate and beneficial manner as provided in this GP.

Unless otherwise limited, manure, sludge, or wastewater may be discharged from a land management unit (LMU) or retention control structure (RCS) into or adjacent to water in the state from a CAFO authorized under this GP resulting from any of the following conditions:

- a discharge of manure, sludge, or wastewater that the permittee cannot reasonably prevent or control resulting from a catastrophic condition other than a rainfall event;
- overflow of manure, sludge, or wastewater from an RCS resulting from a chronic/catastrophic rainfall event; or
- a discharge from a LMU that occurs because the permittee takes measures to de-water the RCS in accordance with Part III.A.10(b), relating to imminent overflow due to chronic/catastrophic rainfall.

**Project No. 2018-015-OTH-NR**

There shall be no discharge of wastewater from the production area into surface water in the state from new source swine, veal, or poultry CAFOs. Wastewater must be contained in RCSs properly designed, constructed, operated, and maintained according to the provisions of this GP.

**C. Fees (Unchanged from Existing Permit):**

- Application Fees
  - New and significant expansion: \$350
  - Renewal or change of ownership or co-permittee by e-permitting: \$75
  - Renewal or change of ownership or co-permittee by paper: \$100
- Annual Water Quality Fee
  - Dry litter poultry: \$300
  - All other CAFOs: \$800

**Number of current/expected authorizations:**

A total of 515 facilities are currently authorized under this permit. The breakdown is as follows:

- State-only authorizations: 37
- TPDES Large CAFO authorizations: 478

**Proposed changes from the current permit:**

1. Part I - Definitions. Five definitions were added (deteriorated well, owner, person, professional engineer, and wellhead protection structure); and two definitions (retention control structure and manure) were revised for clarity and consistency.
2. Sections V.O and P were added to address the United States Environmental Protection Agency's (EPA) electronic-reporting (e-reporting) requirements codified in 40 Code of Federal Regulations (CFR) Part 127 and to allow a temporary waiver from those requirements, if needed.
3. Many miscellaneous and minor revisions were made to clarify existing permit requirements or to address issues identified during the current permit term and comments received from stakeholders or agency staff (See Section V of the Fact Sheet for additional detail regarding all proposed changes).

**Planned stakeholder involvement:**

The draft permit and fact sheet were posted on the Texas Commission on Environmental Quality (TCEQ) website for two weeks to solicit input from stakeholders. CAFO stakeholders were notified via email of the availability of the documents for review and comment.

Comments were received from the CAFO Industry (Texas Association of Dairymen, Texas Cattle Feeders Association, Texas Farm Bureau, Texas Pork Producers Association and Texas Poultry Federation and Affiliates), Enviro-Ag Engineering, Inc., EPA Region 6 and the law firm of Birch, Becker & Moorman, LLP on behalf of Andy Rife.

**Project No. 2018-015-OTH-NR**

The draft general permit (GP) was revised in response to comments from stakeholders, and EPA Region 6, except for the comment from the law firm which is outside the scope of the GP.

**EPA Review:**

In a letter dated December 6, 2018, EPA gave their approval to proceed with the issuance of the permit.

**Public Comment:**

Public comments were received from Brad Tomlinson, Andy Riffe (submitted on his behalf by Erich Birch with Birch, Becker & Moorman, LLP) and Ben Weinheimer, on behalf of the Texas Association of Dairymen, the Texas Cattle Feeders Association, the Texas Farm Bureau, the Texas Pork Producers Association and the Texas Poultry Federation and Affiliates (CAFO Industry Groups).

**1. Mr. Tomlinson**

- A. Mr. Tomlinson commented that the TCEQ should review applications for CAFOs cumulatively or based on other dairies in the area affecting the environment and other issues, water issues affecting the neighbors (draw down of wells), road safety issues, among others. According to him, the dairy owners buy land in another name, so they can dump sludge and wastes off site which are not regulated. This allows runoff and over application of nutrients, thereby causing water quality problems.
- B. Additionally, Mr. Tomlinson requests that the state and the TCEQ have more power to be able to regulate offsite land application areas that are not included as a land management unit under the CAFO authorization.
- C. Mr. Tomlinson commented that an operator who operates multiple CAFOs and has violations should not be granted another CAFO operating permit without considering the violations because it will be an indication of poor site management.

The concerns raised by Mr. Tomlinson were addressed in the Response to Public Comments and as a result, no changes were made to the GP because of Mr. Tomlinson's comments.

**2. CAFO Industry Groups**

- A. They continue their support and approval of the CAFO GP.
- B. The definition of "Wellhead Protection Structure" should be revised by deleting the words "or manure" in two instances within the definition because installation of a Wellhead Protection Structure is only necessary to help prevent direct contact of wastewater with a wellhead.

The GP was revised in response to the comment and to be consistent with Part III.A.4(4)(c)(6) of the CAFO GP.

- C. Part III.A.16. (b)(4) of the CAFO GP should be revised to clarify that only ground water monitoring plans required by the Executive Director must be developed and certified by licensed Professional Engineer or licensed Professional Geoscientist. They recommended adding "(ii)" to Part III.A.16(b)(1).

Project No. 2018-015-OTH-NR

In response to the CAFO Industry Groups' comments, the GP was revised as requested.

**3. Mr. Riffe**

- A. Andy Riffe commented that the CAFO GP does not provide adequate protections to water sources, does not include stringent requirements to protect the water quality in the Ogallala Aquifer or include specific provisions to protect the Aquifer; and that CAFOs pose a threat to ground water resources in West Texas. He suggests the Ogallala Aquifer be designated a sole source aquifer.
- B. Mr. Riffe commented that he believes that CAFOs that are around the Ogallala Aquifer should be required to obtain an individual permit; or a well-designed and TCEQ approved groundwater monitoring system should be required.
- C. Andy Riffe raised concerns about nuisance odors, the proliferation of CAFOs in the Panhandle region, and the cumulative effect of the odors from the existing CAFOs and new CAFOs that will be authorized in the area. Mr. Riffe requested significantly greater set-back distances between CAFOs and neighbors

These concerns raised by Mr. Riffe were addressed in the Response to Public Comments, and as a result, no changes were made to the GP because of Mr. Riffe's comments.

**Potential controversial concerns and legislative interest:**

There are no known controversial issues or legislative interest anticipated at this time. However, there has been an increase during the current permit term in public interest, comments, and general protests on notices of intent for new CAFO facilities covered by this GP.

**Effect on the Regulated community, Public and Agency programs:**

There is no anticipated effect of the proposed changes on the regulated community or on the public. The new requirements should not constitute a regulatory burden on the regulated community.

**Schedule and constraints:**

Published Notice in *Texas Register* & Newspapers: February 22 & 23, 2019

Public Comment Period Ended: March 25, 2019

Public Meeting: March 25, 2019

Scheduled Commission Agenda Date: June 26, 2019

**Statutory authority:**

- Texas Water Code (TWC), §26.121, which makes it unlawful to discharge pollutants into or adjacent to water in the state except as authorized by a rule, permit, or order issued by the commission;
- TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state; and
- TWC, §26.040, which provides the commission with authority to issue general permits.

**Commissioners**

**Page 5**

**June 7, 2019**

**Project No. 2018-015-OTH-NR**

**Agency Contacts:**

Joy Alabi, Project Manager, 512-239-1318, Water Quality Division

Michael Parr, Staff Attorney, 512-239-0611

Paige Bond, Texas Register Coordinator, 512-239-2141

Attachments: Draft Permit, Fact Sheet, and Response to Public Comments

Cc: Chief Clerk, 7 copies

# Texas Commission on Environmental Quality

P.O. Box 13087 Austin, Texas 78711-3087



## GENERAL PERMIT TO DISCHARGE WASTES

under provisions of Section 402 of the Clean Water Act,  
Chapter 26 of the Texas Water Code and  
30 Texas administrative Code Chapter 205  
This permit supersedes and replaces

General Permit No. TXG920000, issued on July 10, 2014

Concentrated animal feeding operations (CAFOs) located in the state of Texas, may discharge into or adjacent to surface water in the state only according to limitations, monitoring requirements and other conditions set forth in this general permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the Commission of the TCEQ (Commission). This general permit meets the Clean Water Act and the Texas Water Code requirements for the protection of water quality. This general permit is applicable both to Texas Pollutant Discharge Elimination System (TPDES) and State-only CAFOs. The issuance of this general permit does not grant to the permittee the right to use private or public property for the conveyance of manure, sludge, or wastewater. This includes property belonging to, but not limited to any individual, partnership, corporation, or other entity. Neither does this general permit authorize any invasion of personal rights nor any violation of federal, state, or local laws and regulations. It is the responsibility of the permittee to acquire any property rights that may be necessary for the conveyance of manure, sludge, or wastewater.

This general permit and the authorization contained herein shall expire at midnight on July 20, 2024.

EFFECTIVE DATE: July 20, 2019

ISSUED DATE:

-----  
For the Commission

General Permit No. TXG920000 for Concentrated Animal Feeding Operations

GENERAL PERMIT NUMBER TXG920000

RELATING TO THE DISCHARGE OF MANURE, SLUDGE AND WASTEWATER FROM CAFO FACILITIES

TABLE OF CONTENTS .....	PAGE
ABBREVIATIONS.....	4
PART I. DEFINITIONS .....	5
PART II. PERMIT APPLICABILITY AND COVERAGE .....	12
A. Discharges Eligible for Authorization .....	12
B. Limitations on Coverage.....	12
C. Obtaining Authorization .....	14
1. Application for Water Quality Authorization.....	14
2. Application for a New Authorization or Significant Expansion of an Existing CAFO.....	14
3. Application for a Substantial Change.....	16
4. Contents of the NOI.....	17
5. Pollution Prevention Plan (PPP).....	18
6. Fees.....	18
7. Revocation of Individual Permit .....	18
8. Change of Ownership or Operational Control .....	18
9. Notice of Change.....	19
10. Air Quality Authorization .....	20
D. Termination of Coverage.....	21
E. Authorization Under an Individual Permit.....	21
F. Permit Expiration.....	22
G. Construction and Operational Deadline .....	22
PART III. POLLUTION PREVENTION PLAN (PPP) REQUIREMENTS .....	23
A. Technical Requirements .....	23
1. Pollution Prevention Plan General Requirements:.....	23
2. Maps .....	24
3. Recharge Feature Certification.....	24
4. Potential Pollutant Sources/Site Evaluation.....	25
5. Discharge Restrictions, Numeric Effluent Limitations, and Monitoring Requirements .....	26
6. Retention Control Structure (RCS) Design and Construction.....	28
7. Cooling Pond .....	34
8. Special Considerations for Existing RCS(s) .....	35
9. Manure and Sludge Storage .....	35
10. RCS Operation and Maintenance .....	36
11. General Operating Requirements .....	37
12. Land Application.....	38
13. Sampling and Testing.....	41
14. Nutrient Utilization Plan (NUP) Applicable to State- only CAFOs.....	42
15. Preventative Maintenance Program.....	44



General Permit No. TXG920000 for Concentrated Animal Feeding Operations

16. Management Documentation ..... 45

B. General Requirements..... 47

C. Training ..... 48

D. Closure Requirements..... 48

PART IV. RECORDKEEPING, REPORTING, AND NOTIFICATION REQUIREMENTS ..... 49

A. Recordkeeping ..... 49

B. Reporting and Notification ..... 50

PART V. STANDARD PERMIT CONDITIONS ..... 53

APPENDIX I..... 56

METHODOLOGY FOR CALCULATING MAXIMUM APPLICATION RATES AND ..... 56

ANNUAL RECALCULATION OF APPLICATION RATES ..... 56

TABLE 1 TO APPENDIX I: PHOSPHORUS INDEX WORKSHEET FOR EAST TEXAS FROM NRCS PRACTICE STANDARD 590 ..... 57

    Phosphorus Index Classification - East Texas..... 58

TABLE 1 TO APPENDIX I: PHOSPHORUS INDEX WORKSHEET FOR WEST TEXAS FROM NRCS PRACTICE STANDARD 590 ..... 59

    Phosphorus Index Classification - West Texas ..... 60

TABLE 2 TO APPENDIX I: APPLICATION RATES FROM NRCS PRACTICE STANDARD 590 - TABLE 2A..... 61

TABLE 2 TO APPENDIX I: APPLICATION RATES FROM NRCS PRACTICE STANDARD 590 - TABLE 2B..... 62

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

### Abbreviations

The following abbreviations, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise:

1. ASABE - American Society of Agricultural and Biological Engineers
2. ASTM International - (formerly American Society for Testing and Materials)
3. BMP - Best management practices
4. BOD5 - Biochemical Oxygen Demand, 5-day
5. CAFO - Concentrated Animal Feeding Operation
6. CFR - Code of Federal Regulations
7. CWA - Clean Water Act
8. ED - Executive Director
9. EPA - United States Environmental Protection Agency
10. LMU - Land management unit
11. MPN - Most probable number
12. NELAC - National Environmental Laboratory Accreditation Conference
13. NELAP - National Environmental Laboratory Accreditation Program
14. NMP - Nutrient management plan
15. NOC - Notice of change
16. NOI - Notice of intent
17. NOT - Notice of termination
18. NRCS - Natural Resources Conservation Service
19. NSPS - New Source Performance Standards
20. NUP - Nutrient utilization plan
21. PPP - Pollution prevention plan
22. RCS - Retention control structure
23. S-Crops Table -NRCS Crops for Texas: S\_Crops.xls
24. SPAW - Soil Plant Air and Water Field and Pond Hydrology
25. SWFTL - Texas A&M AgriLife Extension Soil, Water and Forage Testing Laboratory.
26. TAC - Texas Administrative Code
27. TMDL - Total Maximum Daily Load
28. TWC - Texas Water Code
29. USC - United States Code

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

### Part I. Definitions

All definitions in Chapter 26 of the Texas Water Code (TWC) and 30 Texas Administrative Code (TAC) Chapter 205, 305 and 321 Subchapter B shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

**Agronomic rates** - The land application of animal manure, sludge, or wastewater at rates of application in accordance with a plan for nutrient management which will enhance soil productivity and provide the crop or forage growth with needed nutrients for optimum health and growth based upon a realistic yield goal.

**Animal feeding operation (AFO)** - A lot or facility (other than an aquatic animal production facility) where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and the animal confinement areas do not sustain crops, vegetation, forage growth, or post-harvest residues in the normal growing season. Two or more AFOs under common ownership are a single AFO if they adjoin each other, or if they use a common area or system for the beneficial use of manure, sludge, or wastewater. A land management unit is not part of an AFO.

**Annual(ly)** - Once per calendar year with required events not more than 18 months apart, unless approved in writing by the Executive Director on a case by case basis.

**Aquifer** - A saturated permeable geologic unit that can transmit, store, and yield to a well, the quality and quantities of groundwater sufficient to provide for a beneficial use. An aquifer can be composed of unconsolidated sands and gravels, permeable sedimentary rocks such as sandstones and limestones, and/or heavily fractured volcanic and crystalline rocks. Groundwater within an aquifer can be confined, unconfined, or perched.

**Beneficial use** - Application of manure, sludge, or wastewater to land in a manner which does not exceed the agronomic need or rate for a harvested or cover crop. Application of manure, sludge, or wastewater on the land at a rate below or equal to the optimal agronomic rate is considered a beneficial use.

**Best management practices (BMPs)** - The schedules of activities, prohibitions of practices, maintenance procedures, and other management and conservation practices to prevent or reduce the pollution of waters in the state. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge, land application, or drainage from raw material storage.

**Bypass** - The intentional diversion of waste streams from any portion of a treatment facility.

**Catastrophic conditions** - conditions which cause structural or mechanical damage to an AFO from natural events including high winds, tornadoes, hurricanes, earthquakes, or other natural disasters, other than rainfall events.

**Certified Nutrient Management Specialist (CNMS)** - An organization in Texas or an individual who is currently certified as a nutrient management specialist through a United States Department of Agriculture (USDA)-Natural Resources Conservation Service (NRCS), Texas Certified Crop Advisor's Board, or Texas AgriLife Extension Service recognized certification program.

**Chronic or catastrophic rainfall event** - A series of rainfall events that do not provide an opportunity for dewatering a retention control structure and that are

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

equivalent to or greater than the design rainfall event or any single rainfall event that is equivalent to or greater than the design rainfall event.

**Concentrated animal feeding operation (CAFO)** - A lot or facility (other than an aquatic animal production facility) where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and the animal confinement areas do not sustain crops, vegetation, forage growth, or post-harvest residues in the normal growing season and are defined as follows:

- (a) **Large CAFO** - any AFO which stables and confines and feeds or maintains for a total of 45 days or more in any 12-month period equal to or more than the numbers of animals specified in any of the following categories:
  - (1) 1,000 cattle other than mature dairy cattle or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;
  - (2) 1,000 veal calves;
  - (3) 700 mature dairy cattle (whether milkers or dry cows);
  - (4) 2,500 swine, each weighing 55 pounds or more;
  - (5) 10,000 swine, each weighing less than 55 pounds;
  - (6) 500 horses;
  - (7) 10,000 sheep or lambs;
  - (8) 55,000 turkeys;
  - (9) 125,000 chickens (other than laying hens if the operation does not use a liquid manure handling system);
  - (10) 30,000 laying hens or broilers (if the operation uses a liquid manure handling system);
  - (11) 82,000 laying hens (if the operation does not use a liquid manure handling system);
  - (12) 5,000 ducks (if the operation uses a liquid manure handling system); or
  - (13) 30,000 ducks (if the operation does not use a liquid manure handling system).
- (b) **Medium CAFO** - Any animal feeding operation that discharges pollutants into water in the state either through a man-made ditch, flushing system, or other similar man-made device, or directly into water in the state with the following number of animals:
  - (1) 300 to 999 cattle other than mature dairy cattle or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;
  - (2) 200 to 699 mature dairy cattle (whether milking or dry cows);
  - (3) 300 to 999 veal calves;
  - (4) 750 to 2,499 swine, each weighing 55 pounds or more;
  - (5) 3,000 to 9,999 swine, each weighing less than 55 pounds;
  - (6) 150 to 499 horses;

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (7) 3,000 to 9,999 sheep or lambs;
  - (8) 16,500 to 54,999 turkeys;
  - (9) 37,500 to 124,999 chickens (other than laying hens if the operation does not use a liquid manure handling system);
  - (10) 9,000 to 29,999 laying hens or broilers (if the operation uses liquid manure handling system);
  - (11) 25,000 to 81,999 laying hens (if the operation does not use a liquid manure handling system);
  - (12) 1,500 to 4,999 ducks (if the operation uses a liquid manure handling system);  
or
  - (13) 10,000 to 29,999 ducks (if the operation does not use a liquid manure handling system)
- (c) **Small CAFO** - Any animal feeding operation that is designated by the Executive Director as a CAFO because it is a significant contributor of pollutants into water in the state and is not a large or medium CAFO.
- (d) **State-only CAFO** - An AFO that falls within the range of animals in subparagraph (b) of this paragraph and that is located in the dairy outreach program areas; or an AFO designated by the Executive Director as a CAFO because it is a significant contributor of pollutants into or adjacent to water in the state. A state-only CAFO is authorized under state law.

**Control facility** - Any system used for the collection and retention of manure, sludge, or wastewater at the permitted facility until ultimate use or disposal. This includes all collection ditches, conduits, and swales for the collection of manure, sludge, or wastewater, and all retention control structures.

**Cooling pond** - A shallow man-made structure filled with water for the specific purpose to keep animals cool and promote animal comfort.

**Crop removal** - The amount of nutrients contained in and removed by harvest of the proposed crop.

**Crop requirement** - The amount of nutrients that must be present in the soil in order to ensure that the crop nutrient needs are met, while accounting for nutrients that may become unavailable to the crop due to adsorption to soil particles or other natural causes.

**Dairy outreach program areas (DOPA)** - The area including all of the following counties: Bosque, Comanche, Erath, Hamilton, Hopkins, Johnson, Rains and Wood.

**Design rainfall event**- A design parameter corresponding to precipitation frequency values for a given rainfall duration and return period based on United States Department of Commerce, Weather Bureau, Technical Paper 40 or 49, May 1961.

**Deteriorated well** - a well that, because of its condition, will cause or is likely to cause pollution of any water in the state, including groundwater.

**Dry litter poultry operation**- A poultry animal feeding operation that does not use a liquid manure handling system.

**Edwards Aquifer** - As defined in 30 TAC Chapter 213.3 (relating to Definitions).

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

**Edwards Aquifer recharge zone** - As defined in 30 TAC Chapter 213.3 (relating to Definitions).

**Groundwater** - Subsurface water that occurs below the water table in soils and geologic formations that are saturated, other than underflow of a stream or an underground stream.

**Hydrologic connection** - The connection and exchange between surface water and groundwater.

**Initial authorization** - The Notice of Intent (NOI) that was approved for the site when the facility was first authorized under TXG920000.

**Land application** - The act of applying manure, sludge, or wastewater associated with the AFO including distribution to, or incorporation into, the soil mantle primarily for beneficial use purposes.

**Land management unit (LMU)** - An area of land owned, operated, controlled, rented or leased by a CAFO permittee to which manure, sludge, or wastewater from the CAFO is or may be applied. This includes land associated with a single center pivot system or a tract of land on which similar soil characteristics exist and similar management practices are being used. Land management units include historical waste, application fields. The term "land management unit" does not apply to any lands not owned, operated, controlled, rented or leased by the CAFO permittee for the purpose of off-site land application of manure, sludge, or wastewater wherein the manure, sludge or wastewater is given or sold to others for land application.

**Liner** - Any barrier in the form of a layer, membrane or blanket, either naturally existing, constructed or installed, to prevent a significant hydrologic connection between wastewater contained in retention control structures and water in the state.

**Liquid manure handling system** - A system in which freshwater or wastewater is used for transporting and land applying manure.

**Major sole-source impairment zone** - A watershed that contains a reservoir:

- (a) that is used by a municipality as a sole source of drinking water supply for a population, inside and outside of its municipal boundaries, of more than 140,000; and
- (b) at least half of the water flowing into which is from a source that, on September 1, 2001, is on the list of impaired state waters adopted by the Commission as required by 33 United States Code §1313(d):
  - (1) at least in part because of concerns regarding pathogens and phosphorus; and
  - (2) for which the Commission, at some time, has prepared and submitted a total maximum daily load standard.

**Manure** - Feces and/or urine excreted by livestock and poultry. Manure includes litter, bedding, compost, feed, and other raw materials commingled with feces and/or urine. Manure may exist in solid, semi-solid or slurry form.

**Multi-year phosphorus application** - A practice that allows manure application in a single year at rates in excess of the phosphorus requirements of the crops. In subsequent years, phosphorus may not be applied until the amount applied in the single year has been removed through plant uptake and harvest.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

**Natural Resources Conservation Service (NRCS)** - An agency of the USDA which provides assistance to agricultural producers for planning and installation of conservation practices through conservation programs and technical programs.

**New source** - New source as defined in 30 TAC Chapter 305.2 (relating to Definitions) and that meet the criteria in 30 TAC Chapter 305.534(b).

**Notice of change (NOC)** - A written submission to the Executive Director from a permittee authorized under a general permit, providing information on changes to information previously provided to the Commission, or any changes with respect to the nature or operations of the regulated entity or the characteristics of the discharge.

**Notice of intent (NOI)** - A written submission to the Executive Director from an applicant requesting coverage under the terms of a general permit.

**Notice of termination (NOT)** - A written submission to the Executive Director from a permittee authorized under a general permit requesting termination of coverage under the general permit.

**Nuisance** - Any discharge of air contaminant(s), including but not limited to odors, of sufficient concentration and duration that are or may tend to be injurious to or which adversely affects human health or welfare, animal life, vegetation, or property, or which interferes with the normal use and enjoyment of animal life, vegetation, or property.

**Nutrient Management Plan (NMP)** - A plan based on the NRCS Practice Standard Nutrient Management Code 590, to address the amount (rate), source, placement (method of application), and timing of the application of plant nutrients and soil amendments.

**Nutrient Utilization Plan (NUP)** - A NMP to evaluate and address site specific characteristics of a LMU to ensure that the beneficial use of manure, sludge, or wastewater is conducted in a manner to prevent adverse impacts on water quality.

**100-year flood plain** - Any land area which is subject to a 1.0% or greater chance of flooding in any given year from any source.

**Open lot** - Pens or similar confinement areas with dirt, concrete, or other paved or hard surfaces wherein livestock or poultry are substantially or entirely exposed to the outside environment except for small portions of the total confinement area affording protection by windbreaks or small shed-type shade areas and that do not sustain crops, vegetation, forage growth, or postharvest residues in the normal growing season. The term open lot is synonymous with the terms dirt lot, or dry lot, for livestock or poultry, as these terms are commonly used in the agricultural industry.

**Operational** - The facility is constructed to a point at which animals may be stabled, confined, fed, and maintained in accordance with this general permit. The facility does not have to be operating at the maximum number of animals authorized for the site.

**Operator** - The person responsible for the overall operation of a facility or part of a facility.

**Owner** - The person who owns a facility or part of a facility.

**Permittee** - Any person issued an individual permit or order or covered by a general permit.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

**Person** - An individual, corporation, organization, government or governmental subdivision or agency, business trust, partnership, association, or any other legal entity.

**Pesticide** - A substance or mixture of substances intended to prevent, destroy, repel, or mitigate any pest, or any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant. Pesticide includes insecticides, nematicides, rodenticides, fungicides, and herbicides.

**Playa** - A flat-floored, clayey bottom of an undrained basin that is located in an arid or semi-arid part of the State, is naturally dry most of the year, and collects runoff from rain but is subject to rapid evaporation.

**Process generated wastewater** - Any water directly or indirectly used in the operation of an animal feeding operation (such as spillage or overflow from animal or poultry watering systems which comes in contact with manure; washing, cleaning, or flushing pens, barns, manure/slurry pits; direct contact swimming, washing, or spray cooling of animals; and dust control), including water used in or resulting from the production of animals or poultry or direct products (e.g., milk, meat, or eggs).

**Production area** - That part of a CAFO that includes, but is not limited to, the animal confinement area, the manure storage area, the raw materials storage area, and the control facilities.

**Professional Engineer (PE)** - An engineer who maintains a current license through the Texas Board of Professional Engineers in accordance with the requirements for professional practice.

**Professional Geoscientist (PG)** - A geoscientist who maintains a current license through the Texas Board of Professional Geoscientists in accordance with the requirements for professional practice.

**Protection zone** - The area within the watershed of a sole-source surface drinking water supply that is:

- (a) within two miles of the normal pool elevation, as shown on a United States Geological Survey (USGS) 7 1/2-minute quadrangle topographic map, of a sole-source drinking water supply reservoir;
- (b) within two miles of that part of a perennial stream that is:
  - (1) a tributary of a sole-source drinking water supply; and
  - (2) within three linear miles upstream of the normal pool elevation, as shown on a USGS 7 1/2-minute quadrangle topographic map, of a sole-source drinking water supply reservoir; or
- (c) within two miles of a sole-source surface drinking water supply river, extending three linear miles upstream from the sole-source water supply intake point.

**Recharge feature** - Those natural or artificial features either on or beneath the ground surface at the site under evaluation that provide or create a significant hydrologic connection between the ground surface and the underlying groundwater within an aquifer. Significant artificial features include, but are not limited to, wells and excavation or material pits. Significant natural hydrologic connection includes, but are not limited to: faults; fractures; sinkholes or other macro pores that allow direct surface infiltration; a permeable or a shallow soil material that overlies an aquifer; exposed



## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

geologic formations that are identified as an aquifer; or a water course bisecting an aquifer.

**Retention control structure (RCS)** - Any basin, pond, pit, tank, conveyance, or lagoon used to hold, store or treat manure, wastewater, and sludge. The term RCS does not include conveyance systems such as irrigation piping or ditches that are designed and maintained to convey but not store any manure or wastewater, nor does it include cooling ponds located in the production area or bermed manure and sludge storage areas.

**Significant Expansion** - Any change to the CAFO that increases the manure production at the CAFO by more than 50%, above the maximum operating capacity stated in the initial authorization for the facility under TXG920000.

**Sludge** - Solid, semi-solid, or slurry manure generated during the treatment of or storage of any manure or wastewater. The term includes material resulting from treatment, coagulation, or sedimentation of manure in a RCS. 30 TAC Chapter 312 rules covering sludge do not apply to this permit.

**Soil Plant Air and Water (SPAW) Field Pond Hydrology** - SPAW is a USDA water budgeting tool for farm fields, ponds, and inundated wetlands. The SPAW model may be used to perform daily hydrologic water budgeting using the NRCS Runoff Curve Number method.

**Sole-source surface drinking water supply** - A body of surface water that is identified as a public water supply in 30 TAC Chapter 307.10, Appendix A and is the sole source of supply of a public water supply system, exclusive of emergency water connections.

### **Substantial change**

- (a) Changing animal type or increasing authorized head count that increases the manure production at the CAFO by less than 50% of the maximum operating capacity stated in the initial authorization for the facility under TXG920000;
- (b) Adding land management units or increasing application acreage; and
- (c) Using a crop or yield goal to determine maximum application rates for manure or wastewater not included in the CAFOs authorization.

**Texas State Soil and Water Conservation Board (TSSWCB)** - The state agency charged with the overall responsibility for administering and coordinating the state's soil and water conservation program with the state's soil and water conservation districts. The TSSWCB is the lead agency for the planning, management and abatement of agricultural and silvicultural nonpoint source pollution.

**25-year, 24-hour rainfall event** - The maximum rainfall event with a probable recurrence interval of once in 25 years, with a duration of 24 hours, as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, or equivalent regional or state rainfall information.

**Upset** - An exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

**Wastewater** - Any water, including process generated wastewater and precipitation,

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

which comes into contact with any manure, sludge, bedding, or any raw material or intermediate or final material or product used in or resulting from the production of livestock or poultry or direct products (e.g., milk, meat, or eggs).

**Water in the state** - Groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the state or inside the jurisdiction of the state.

**Well** - Any artificial excavation into and/or below the surface of the earth whether in use, unused, abandoned, capped, or plugged that may be further described as one or more of the following:

- (a) an excavation designed to explore for, produce, capture, recharge, or recover water, any mineral, compound, gas, or oil from beneath the land surface;
- (b) an excavation designed for the purpose of monitoring any of the physical or chemical properties of water, minerals, geology, or geothermal properties that exist or may exist below the land surface;
- (c) an excavation designed to inject or place any liquid, solid, gas, vapor, or any combination of liquid, solid, gas, or vapor into any soil or geologic formation below the land surface; or
- (d) an excavation designed to lower a water or liquid surface below the land surface either temporarily or permanently for any reason.

**Wellhead protection structure** - A structure used to protect the wellhead from irrigation wastewater. It may include a hard-walled, possibly framed, structure with a roof or otherwise covered. Structure should be secured to the ground or wellhead to withstand the elements (e.g., wind or storms) and grazing livestock. Structure must be designed to avoid wastewater from contacting the wellhead. Structure may be constructed of plywood, corrugated or sheet metal, fiber glass, plastics, synthetics, or other materials, which are structurally capable for the intended purpose. Structure may be removable or hinged to allow servicing of well or well components.

## Part II. Permit Applicability and Coverage

### A. Discharges Eligible for Authorization

This general permit provides authorization for facilities defined or designated as CAFOs to discharge manure, sludge, and wastewater associated with the operation of a CAFO into or adjacent to water in the state. The Executive Director may designate any AFO as a CAFO upon determining that it is a significant contributor of pollutants to water in the state. Discharges to water in the state may occur from a CAFO designed, constructed, and properly operated and maintained under the provisions of this general permit. Manure, sludge, and wastewater generated by a CAFO shall be retained and used in an appropriate and beneficial manner as provided in this general permit.

### B. Limitations on Coverage

1. Limitations Based on Facility Location

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

Discharges from the following CAFOs are not eligible for coverage under this general permit and must be authorized under an individual permit:

- (a) Except for an existing CAFO which was authorized by the Commission prior to January 10, 1997, any CAFO located within one mile of Coastal Natural Resource Areas as defined by Texas Natural Resources Code §33.203.
- (b) Any dairy CAFO located in a major sole-source impairment zone.
- (c) Any CAFO where any part of the production area of the CAFO is located or proposed to be located within the protection zone of a sole-source surface drinking water supply. This paragraph does not apply to a poultry operation that does not use a liquid manure handling system, commonly referred to as a dry litter poultry operation.
- (d) Any CAFO where any part of a production area or LMU is located in a watershed of a segment listed on the current Environmental Protection Agency (EPA) approved Clean Water Act Section 303(d) list of impaired waters as required by 33 United States Code (USC) §1313(d) where a Total Maximum Daily Load (TMDL) implementation plan has been adopted by the Commission that establishes additional water quality protection measures for CAFOs that are not required by the CAFO general permit.
- (e) Any CAFO that has a site or customer classification that is “unsatisfactory performer” under 30 TAC Chapter 60.3 (relating to Use of Compliance History).
- (f) Any CAFO required to operate under an individual permit by the Executive Director.

### 2. Other Limitations

Discharges are not eligible for authorization under this general permit where prohibited by:

- (a) 30 TAC Chapter 311 (relating to Watershed Protection);
- (b) 30 TAC Chapter 213 (relating to the Edwards Aquifer); or
- (c) any other applicable rules or laws.

### 3. Denial of Authorization

- (a) The Executive Director may deny an application for authorization under this general permit, and may require that the applicant apply for an individual permit, if the Executive Director determines that the discharge will not meet water quality standards defined in 30 TAC Chapter 307.
- (b) The Executive Director may deny a notice of intent (NOI) or revoke authorization under this general permit if the applicant submits a false affidavit relating to public notice or public meeting that is consistent or equivalent to the rules in 30 TAC 39 Subchapter C.
- (c) The Executive Director may deny, cancel, revoke, or suspend authorization to discharge under this general permit based on a finding of historical and significant noncompliance. An applicant who owns or

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

operates a facility classified as an “unsatisfactory performer” is entitled to a hearing before the Commission prior to having its coverage denied or suspended, in accordance with Texas Water Code § 26.040(h).

- (d) Denial of authorization to discharge under this general permit or suspension of a permittee's authorization under this general permit shall be in accordance with 30 TAC Chapter 205 (relating to General Permits for Waste Discharges).

### C. Obtaining Authorization

#### 1. Application for Water Quality Authorization

- (a) Submission of a NOI, and for Large CAFOs, a NMP, certified by a Certified Nutrient Management Specialist, is an acknowledgment that the conditions of this general permit are applicable to the proposed discharge, and that the applicant agrees to comply with the conditions of this general permit.
- (b) The NOI must contain all information as prescribed on forms provided by the Executive Director.
- (c) For renewal under this general permit, provisional authorization to discharge under the terms and conditions of this general permit begins 48 hours after a completed NOI is postmarked for delivery to the TCEQ. If the NOI is submitted electronically, provisional authorization to discharge under the terms and conditions of this general permit begins immediately following confirmation of receipt of the NOI by the TCEQ.

For a new CAFO or an existing CAFO that is proposing a significant expansion or substantial change to the facility, authorization under the terms and conditions of this general permit begins when the applicant is issued written approval of the NOI by the Executive Director.

- (d) Following review of the NOI, the Executive Director shall either confirm coverage by providing a notification and an authorization number to the applicant or notify the applicant that coverage under this general permit is denied.
- (e) A copy of the NOI, along with any correspondence from the Executive Director confirming permit coverage, shall be retained at the site and kept with the pollution prevention plan (PPP).
- (f) The owner of a facility must be the applicant identified on the NOI for authorization. If the facility is owned by one person and operated by another, the operator may be a co-applicant.

#### 2. Application for a New Authorization or Significant Expansion of an Existing CAFO

An applicant for a new CAFO or significant expansion of an existing CAFO must adhere to the following procedures:

- (a) The applicant must submit the NOI, a complete technical application, and a NMP (NMP is not applicable to State only CAFOs) to the Executive Director.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (b) After the applicant receives written instructions from the TCEQ's Office of Chief Clerk, the applicant must publish notice of the Executive Director's preliminary determination of the NOI, technical application, and the NMP.
- (c) The notice must include:
  - (1) the legal name of the CAFO applicant;
  - (2) the address of the applicant;
  - (3) a brief summary of the information included in the NOI, such as the general location of the CAFO and LMUs utilized by the CAFO, the proposed maximum number of animals for the CAFO, and a description of the receiving water and discharge route for any discharge;
  - (4) the location and mailing address where the public may provide comments to the Executive Director;
  - (5) the public location where copies of the NOI, Executive Director's technical summary, NMP and CAFO general permit may be reviewed; and
  - (6) if required by the Executive Director, the date, time and location of the public meeting.
- (d) The public notice must be published at least once in a newspaper of general circulation in the county where the CAFO is located or proposed to be located. This notice shall provide opportunity for the public to submit comments on the NOI, NMP, and Executive Director's technical summary. In addition, the notice shall allow the public the opportunity to request a public meeting. The Executive Director will hold a public meeting if it is determined there is significant public interest.
- (e) The public comment period begins on the first date the notice is published and ends 30 days later unless a public meeting is held. The public may submit written comments to the TCEQ Office of Chief Clerk during the comment period detailing how the NOI or NMP for the CAFO fails to meet the technical requirements or conditions of this general permit.
- (f) If significant public interest exists, the Executive Director will direct the applicant to publish a notice of the public meeting. The applicant must publish notice of a public meeting at least 30 days before the meeting and hold the public meeting in the county where the facility is located or proposed to be located. TCEQ staff will facilitate the meeting. If a public meeting is held, the comment period will end at the conclusion of the public meeting.
- (g) At the public meeting, the applicant shall describe the proposed operations and provide maps and other facility data. The applicant shall provide a sign in sheet for attendees to register their names and addresses and furnish the sheet to the Executive Director. The public meeting held under this general permit is not an evidentiary proceeding.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (h) The applicant must publish public notice and if required, notice of the public meeting in accordance with Part II.C.2(c) at least once in a newspaper of general circulation in the county where the CAFO is located or proposed to be located.
- (i) The applicant must file with the TCEQ's Office of the Chief Clerk a copy and an affidavit of the publication of notice(s) within 60 days of receiving the written instructions from the Office of Chief Clerk.
- (j) The Executive Director, after considering public comment, shall approve or deny the NOI based on whether the NOI and technical application meet the requirements of this general permit.
- (k) Persons whose names and addresses appear legibly on the sign in sheet from the public meeting and persons who submitted written comments to the TCEQ will be notified by the TCEQ's Office of Chief Clerk of the Executive Director's decision to issue or deny the authorization and provided the final technical summary the Executive Director considered when making the determination.

### 3. Application for a Substantial Change

An applicant for a CAFO requesting a substantial change to the terms of the NMP shall adhere to the following procedures:

- (a) The applicant must submit the notice of change (NOC) and those portions of the technical packet that are applicable to the change to the Executive Director.
- (b) The TCEQ's Office of the Chief Clerk shall issue and post the notice of the Executive Director's preliminary determination of the NOC and the revised terms of the NMP on the TCEQ website at <http://www14.tceq.texas.gov/epic/eCID/>. The notice shall include:
  - (1) the legal name of the CAFO applicant;
  - (2) the address of the applicant;
  - (3) a brief summary of the information included in the NOC, such as the general location of the CAFO, proposed change to the terms of the NMP and a description of the receiving water;
  - (4) the location and mailing address where the public may provide comments to the Executive Director;
  - (5) the public location where copies of the NOC, Executive Director's technical summary, NMP, and CAFO general permit may be reviewed; and
  - (6) if required by the Executive Director, the date, time, and location of the public meeting.
- (c) The public comment period begins on the first date the notice is posted and ends 30 days later unless a public meeting is held. The public may submit comments to the TCEQ Office of Chief Clerk during the comment period detailing how the revised terms of the NMP for the CAFO fail to meet the technical requirements or conditions of this general permit.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (d) The Executive Director will hold a public meeting if it is determined there is significant public interest. The Executive Director will post a notice of the public meeting on the TCEQ internet site at: <http://www14.tceq.texas.gov/epic/eCID/>. The notice of a public meeting will be posted at least 30 days before the meeting, and the meeting will be held in the county where the facility is located. TCEQ staff will facilitate the meeting and provide a sign in sheet for attendees to register their names and addresses. The public meeting held under this general permit is not an evidentiary proceeding. If a public meeting is held, the comment period will end at the conclusion of the public meeting.
- (e) The Executive Director, after considering public comment, shall incorporate the revised terms of the NMP into the permit. Once the revised terms of the NMP have been incorporated into the permit, the Executive Director will include the revised terms of the NMP into the permit record and notify the permittee and the public of the revised terms and conditions of the permit.

### 4. Contents of the NOI

Applicants seeking authorization to discharge under this general permit must submit a completed NOI on a form approved by the Executive Director. Large CAFOs, must also submit a NMP that satisfies the minimum requirements specified in Part III.A.12 of this permit. The NOI shall, at a minimum, include:

- (a) the legal name and address of the applicant;
- (b) the facility name and address;
- (c) the location of the CAFO;
- (d) the latitude and longitude of the production area;
- (e) a description and the size of the CAFO facility;
- (f) the number and type of animals and their housing situation;
- (g) the type of containment and storage;
- (h) each retention control structure capacity;
- (i) the estimated amount of manure and wastewater generated per year;
- (j) the estimated amount of manure and wastewater transferred off-site per year;
- (k) a description of each LMU including:
  - (1) total acreage of each LMU available for land application of manure or wastewater;
  - (2) the estimated land application rate; and
- (l) a topographic map or other diagram as specified in the instructions to the NOI.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

### 5. Pollution Prevention Plan (PPP)

A PPP must be developed according to the requirements of this permit prior to submittal of a NOI. The plan must be developed according to the requirements of Part III of this general permit and be signed according to requirements of Part V.J. of this general permit.

### 6. Fees

#### (a) Application Fees

(1) An application fee must be submitted with the NOI:

(i) \$75 for renewal or change of ownership or co-permittee submitted by online e-permitting;

(ii) \$100 for renewal or change of ownership or co-permittee submitted by paper;

(iii) \$350 for a new or significant expansion.

(2) A fee is not required for submission of a Notice of Change (NOC) or Notice of Termination (NOT).

#### (b) Annual Water Quality Fee

CAFOs authorized under this general permit must pay an annual water quality fee of \$800 except for dry litter poultry CAFOs which must pay an annual water quality fee of \$300. The annual water quality fee will be assessed on any CAFO that has an active authorization under this general permit on September 1<sup>st</sup> of each calendar year. To terminate coverage under this general permit and avoid the annual water quality fee, a NOT must be received by TCEQ prior to September 1<sup>st</sup>.

### 7. Revocation of Individual Permit

For facilities authorized under an individual permit and eligible for coverage under this general permit, the submittal of a NOI and NMP where required constitutes the applicant's intent to be authorized under this general permit and also serves as a request to voluntarily revoke coverage under an individual permit. The individual permit will be revoked following issuance of the authorization providing coverage under the general permit.

### 8. Change of Ownership or Operational Control

Authorization under this general permit is not transferable. If the permittee (either owner or operator) of the regulated entity changes, the present permittee must submit an NOT and the new owner or operator, if identified as a co-permittee, must submit an NOI. The NOT and NOI must be submitted not later than 10 days prior to the change in owner or operator status. The NOT and NOI will not be processed until the Executive Director is notified, in writing, that the change in owner or operator status has occurred. Any change in a permittee's Charter Number, as registered with the Texas Secretary of State, is considered a change in ownership of the company and would require the new owner or operator to apply for permit coverage as stated above. If the NOT and NOI are submitted as required under this provision; there will be no lapse in authorization for the facility.



## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

### 9. Notice of Change

All permittees that are proposing changes to their authorization must submit such changes on a form prescribed by the Executive Director. The following changes to an existing CAFO shall be processed through a NOC:

#### (a) Large CAFOs

(1) A NOC form must be submitted with supplemental or corrected information within 14 days following:

- (i) the time when the permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in the NOI or NOI attachments; or
- (ii) the time when relevant facts in the NOI or NOI attachments change, including but not limited to: permittee address, permittee phone number, construction or modification of a RCS, or any change to the site map.

(2) Changes to the terms of the NMP

- (i) Substantial change to the terms of the NMP. Those changes that constitute a “substantial change” are defined in Part I, relating to definitions; or
- (ii) Non-substantial changes include but are not limited to the following:
  - (A) a reduction in the number of permitted animals;
  - (B) a reduction in manure production;
  - (C) a decrease in LMU acreage;
  - (D) removal of a LMU;
  - (E) removal of crop(s) and or yield goal(s);
  - (F) changes to the site-specific LMU information on Table 1 of Appendix I - Phosphorus Index Worksheet of this general permit;
  - (G) changes to the maximum application rates, Lbs/Ac of nitrogen or phosphorus as P<sub>2</sub>O<sub>5</sub> to be land applied; and
  - (H) changes in the phosphorus index rating.

(3) Substantial and Non-Substantial Changes to the NMP

- (i) When changes are made to the CAFO's NMP previously submitted to the Executive Director, the permittee must provide the Executive Director with a NOC form containing the terms of the most current version of the revised NMP and identify changes from the previous version, with the exception of annual recalculations of application rates for manure and wastewater, which are not required to be submitted to the Executive Director.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (ii) When changes to a NMP are submitted, the Executive Director will review the changes to ensure that they meet the requirements of this permit. If the Executive Director determines that the changes to the NMP necessitate revision to the terms of the NMP incorporated into the permit issued to the CAFO, the Executive Director will determine whether such changes are substantial.
- (iii) If the Executive Director determines that the changes to the terms of the NMP are not substantial, the Executive Director will include the revised terms of the 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.

After permit issuance, the Executive Director will notify the public of the revised terms of the NMP by posting for 2 weeks on the TCEQ internet site at:

<https://www.tceq.texas.gov/permitting/wastewater/cafo/cafo-nonsubstantial-changes>.

- (iv) If the Executive Director determines that the changes to the terms of the NMP are substantial, the application shall be processed in accordance with Part II.C.3 of this general permit.

### (b) State Only CAFOs

A NOC form must be submitted with supplemental or corrected information within 14 days following:

- (1) the time when the permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in the NOI or NOI attachments; or
- (2) the time when relevant facts in the NOI or NOI attachments change, including but not limited to: permittee address, permittee phone number, any increase in waste production other than those defined as a significant expansion, LMU acreage or boundaries, construction or modification of a RCS, or any change to the site map.

## 10. Air Quality Authorization

Air quality authorization under the Texas Clean Air Act, Texas Health and Safety Code §382.051, is required for all CAFOs, regardless of their size. Depending on its specific characteristics, a CAFO may obtain air quality authorization in one of three ways:

- (a) by meeting the requirements of a permit-by-rule under 30 TAC Chapter 106, Subchapter F (relating to Animal Confinement);
- (b) by obtaining an individual permit under 30 TAC Chapter 116 (relating to Control of Air Pollution by Permits for New Construction or Modification); or

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (c) by meeting the requirements of the air standard permit outlined in 30 TAC Chapter 321.43 (relating to Air Standard Permit Authorization for Concentrated Animal Feeding Operations).

### **D. Termination of Coverage**

1. A permittee shall terminate coverage under this general permit through the submittal of a NOT when the owner or operator, if identified as a co-permittee, of the facility changes, the discharge becomes authorized under an individual permit, or the use of the property changes and is no longer subject to regulation under this general permit. If the facility is no longer subject to this general permit, the permittee must close the facility in accordance with Part III.D of this general permit prior to terminating coverage and filing the NOT. A NOT must be received by the TCEQ prior to September 1<sup>st</sup> to avoid assessment of the annual water quality fee.
2. One of the following must be submitted within 24 hours of submitting a NOT:
  - (a) a NOI when the permittee or co-permittee of the facility changes,
  - (b) an individual permit application,
  - (c) certification by a licensed Texas Professional Engineer that closure has been completed, as required by Part III.D.(3), or
  - (d) a statement from the permittee that the facility will be operated as an AFO not defined or designated as a CAFO.
3. The authorization will not be terminated until:
  - (a) final action is taken on the NOI or individual permit application,
  - (b) receipt of certification by a licensed Texas Professional Engineer that closure is complete, or
  - (c) receipt of a statement from the permittee that the facility will be operated as an AFO not defined or designated as a CAFO.
4. This section does not prohibit the Executive Director from denying, cancelling, revoking, or suspending authorization to operate under this general permit, as allowed by Part II.B.3 of this permit and 30 TAC Chapter 205.4 (relating to Authorizations and Notices of Intent).

### **E. Authorization Under an Individual Permit**

1. Individual Permit Alternative  
Discharges eligible for authorization by this general permit may alternatively be authorized by an individual permit according to 30 TAC Chapters 281 and 305 (relating to consolidated permits).
2. Transfer of Authorization to an Individual Permit  
When an individual permit is issued for a discharge that is currently authorized under this general permit, the permittee shall terminate coverage under this general permit and shall submit a NOT to the Executive Director. The authorization under this general permit will be terminated when the Executive Director takes final action on the individual permit and receives the

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

NOT. A CAFO cannot be authorized under both the CAFO general permit and an individual permit.

### **F. Permit Expiration**

#### 1. Permit Term

This general permit is issued for a term not to exceed five (5) years. All active authorizations expire on the date provided on page one (1) of this general permit. Authorizations for discharge under the provisions of this general permit may be issued until the expiration date of the permit. This general permit may be amended, revoked, or cancelled by the Commission after notice and comment as provided by 30 TAC §§205.3 and 205.5.

#### 2. Permit Renewal

If before the expiration of this permit, the Commission has made a determination to renew this general permit, the general permit shall remain in effect after the expiration date for those existing CAFOs covered by the general permit and shall remain in effect for these CAFOs until the date the Commission takes final action on the proposal to reissue the general permit. No new NOIs can be accepted or new authorizations issued under this general permit after the expiration date.

#### 3. Application following Renewal

Upon issuance of this general permit, all facilities that wish to continue authorization, must submit a NOI on forms provided by the Executive Director in accordance with the requirements of this general permit, within 180 days after the effective date. Failure to submit a NOI by the deadline will result in expiration of the existing authorization to operate under the expired general permit.

Facilities that do not wish to continue authorization under the renewed general permit must submit a NOT prior to September 1<sup>st</sup> to avoid the assessment of an annual water quality fee. Any facility still authorized up to 180 days after the general permit is renewed will be billed.

#### 4. Expiration without Renewal

According to 30 TAC §205.5(d) (relating to Permit Duration, Amendment, and Renewal), if the Commission has made a determination that the general permit will not be renewed at least 90 days before the expiration date of this general permit, permittees authorized under this general permit shall submit an application for an individual permit before the general permit expires. If an application for an individual permit is submitted before the general permit expires, authorization under the expired general permit remains in effect until either the issuance or denial of an individual permit.

### **G. Construction and Operational Deadline**

Any CAFO that obtains authorization under this general permit must be operational within 18 months of the date of the CAFOs authorization or must terminate coverage under this general permit by submitting a NOT. Upon written request to the TCEQ Water Quality Division, the Executive Director may grant a one-time extension up to an additional 18 months, to allow the CAFO additional

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

time to become operational. If an extension is granted and the CAFO is not operational at the expiration of the extension period, the CAFO must submit a NOT terminating coverage under this general permit. The facility does not have to be operating at the maximum number of animals authorized to be considered operational.

### Part III. Pollution Prevention Plan (PPP) Requirements

#### A. Technical Requirements

##### 1. Pollution Prevention Plan General Requirements:

- (a) A PPP shall be developed prior to NOI and NMP submittal for each CAFO covered under this general permit. Pollution prevention plans shall:
  - (1) be prepared in accordance with good engineering practices;
  - (2) include control measures necessary to limit the discharge of pollutants to surface water in the state;
  - (3) describe and ensure the implementation of practices that are to be used to assure compliance with the limitations and conditions of this permit;
  - (4) include all information listed in Part III.A; and
  - (5) identify specific individual(s) who is/are responsible for development, implementation, operation, maintenance, inspections, recordkeeping, and revision of the PPP.
- (b) Amending the PPP. The permittee shall revise the PPP:
  - (1) before any change in the acreage or boundaries of LMUs;
  - (2) before any increase in the maximum number of animals;
  - (3) after any new construction or modification of control facilities;
  - (4) before any change which has a significant effect on the potential for the discharge of pollutants to water in the state;
  - (5) if the PPP is not effective in achieving the general objectives of controlling pollutants in discharges from the production area or LMUs; or
  - (6) within 90 days following written notification from the Executive Director that the plan does not meet one or more of the minimum requirements of this general permit.

##### (c) Equivalent PPP Standards

Where design, planning, construction, operation, and maintenance or other documentation equivalent to PPP requirements are contained in site specific plans prepared and certified by the NRCS, Texas State Soil and Water Conservation Board, or their designee, that documentation may be used to document BMPs or applicable portions of the PPP requirements in this general permit. Where provisions in the certified plan are substituted for applicable BMPs or portions of the PPP, the PPP must refer to the appropriate section of the certified plan. If the PPP

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

contains reference to a certified plan, a copy of the certified plan must be kept with the PPP.

### 2. Maps. The permittee shall maintain and update the following maps as part of the PPP:

#### (a) Site Map

The map shall show the production area and include, at a minimum, pens and open lots, barns, berms, permanent manure storage areas, composting areas, control facilities including RCSs, water wells (abandoned, plugged and in use), surface water in the state, and dead animal burial sites.

#### (b) Land Management Unit Map

The map shall include, at a minimum, the following information: the boundary and acreage of each LMU; all buffer zones required by this permit; the location of the production area; water wells, abandoned, plugged and in use, which are on-site or within 500 feet of the facility boundary; all surface water in the state located on-site and within one mile of the property boundary; and the facility boundary.

#### (c) Combined Maps

Because of the unique nature of some sites it is acceptable to combine the elements of the Land Management Unit Map with the Site Map as long as map features can be clearly determined.

### 3. Recharge Feature Certification

(a) The permittee shall have a recharge feature certification developed in accordance with the Executive Director's guidance, RG-433 "Guidelines for Identifying and Protecting Aquifer Recharge Features." Use of the forms provided in RG-433 is optional. The certification must be signed and sealed by a licensed Texas Professional Engineer, or a licensed Texas Professional Geoscientist, documenting the absence or presence of any natural or artificial recharge features identified on any tracts of land owned, operated, controlled, rented, or leased by the permittee and to be used as a part of a CAFO or LMU.

(b) If the recharge feature certification identifies the presence of recharge features, the applicant shall have protective measures developed, signed and sealed by a licensed Texas Professional Engineer, or licensed Texas Professional Geoscientist, as appropriate and in conformance with the Texas Engineering Practices Act and the Texas Geoscience Practice Act and the licensing and registration boards under these acts. The protective measures must prevent impacts to an aquifer from any recharge features present. The protective measures must include at least one of the following:

(1) measures to protect each located recharge feature, such as impervious cover, berms, buffer zones, or other equivalent protective measures; or

(2) a detailed groundwater monitoring plan, in accordance with Part III.A.16(b); or

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (3) provisions for any other similar method or approach demonstrated by the applicant to be protective of any associated recharge feature and approved by the Executive Director.
  - (c) The permittee must implement the protective measures.
4. Potential Pollutant Sources/Site Evaluation
  - (a) Potential Pollutant Sources

Potential pollutant sources include any activity or material of sufficient quantity that may reasonably be expected to add pollutants to water in the state from the facility. The permittee shall conduct a thorough site inspection of the facility to identify all potential pollutant sources. The inspection shall encompass all land that is part of the production area and LMUs. An evaluation of potential pollutant sources shall identify the types of pollutant sources, provide a description of the pollutant sources, and indicate all measures that will be used to prevent contamination from the pollutant sources. The type of pollutant sources found at any particular site varies depending upon a number of factors, including, but not limited to: site location, historical land use, proposed facility type, and land application practices. Potential pollutant sources include, but are not limited to, the following: manure, sludge, wastewater, dust, silage stockpiles, fuel storage tanks, pesticides and inorganic fertilizers, lubricants, dead animals, feed and bedding waste, bulk cleaning chemicals, and compost.
  - (b) Soil Erosion

The permittee shall identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion. If these areas have the potential to contribute pollutants to water in the state, the permittee shall identify in the PPP measures used to limit erosion and pollutant runoff.
  - (c) Well Protection Requirements
    - (1) The permittee must not locate or operate RCSs, holding pens, or LMUs within the following buffer zones except in accordance with paragraph (2) in this section:
      - (i) public water supply wells - 500 feet;
      - (ii) wells used exclusively for private water supply - 150 feet; or
      - (iii) wells used exclusively for agriculture irrigation - 100 feet.
    - (2) The permittee may continue the operation and use of any existing holding pens, LMUs and RCSs located within the required well buffer zones provided they are protected in accordance with the recharge feature evaluation and certification required in Part III.A.3.
      - (i) Wells drilled before July 20, 2004, and any replacement wells, must be protected in accordance with the recharge feature certification requirements in this general permit. The recharge feature certification serves as documentation authorizing

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

variances to the buffer zone requirements for those wells. The recharge feature certification must be kept on site and made available to TCEQ personnel upon request. It is not necessary to submit a request for a variance to the buffer zone requirements for these wells to the TCEQ.

- (ii) For wells drilled on or after July 20, 2004, requests for variances to the buffer zone requirements must be submitted to the TCEQ for review and approval. The buffer variance approval letter must be kept on site and made available to TCEQ personnel upon request.
  - (3) Construction of any new water well must be done in accordance with the requirements of this general permit and 16 TAC Chapter 76, relating to Water Well Drillers and Water Well Pump Installers.
  - (4) All abandoned and deteriorated wells shall be plugged according to 16 TAC Chapter 76.104.
  - (5) The permittee shall not locate new LMUs within the required well buffer zones unless additional wellhead protective measures are implemented that will prevent pollutants from entering the well and contaminating groundwater. An exception to the full well buffer zone for a private drinking water well or a water well used exclusively for agricultural irrigation may be approved by the Executive Director if a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist provides accurate documentation showing that additional wellhead protective measures will be or have been implemented that will prevent pollutants from entering the well and contaminating the groundwater. Additional protective measures may include a sanitary seal, annular seal, a steel sleeve, or surface slab.
  - (6) Irrigation of wastewater directly over a well head will require a wellhead protection structure protective of the wellhead that will prevent contact from irrigated wastewater.
- (d) Control Facilities
- The PPP shall include the location and a description of control facilities. The appropriateness of any control facilities shall reflect the identified sources of pollutants at the CAFO.
- (e) 100-year Floodplain
- A site evaluation shall show that all control facilities are located outside of the 100-year floodplain or protected from inundation and damage that may occur during the 100-year flood event. Manure, sludge, or wastewater may only be applied to the areas in the 100-year floodplain at agronomic rates not to exceed the hydrologic needs of the crop.
5. Discharge Restrictions, Numeric Effluent Limitations, and Monitoring Requirements
- (a) Discharge Restrictions



## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (1) The permittee must comply with all applicable reporting, sampling, and analysis requirements associated with a discharge, in accordance with this general permit.
- (2) In accordance with Part II.A. of this general permit, a discharge to surface water in the state may occur from a CAFO which is properly designed (25-year frequency 24-hour duration or no discharge for a new source swine, veal or poultry), constructed, operated and maintained under the provisions of this general permit. Manure, sludge, and wastewater generated by a CAFO shall be retained and used in an appropriate and beneficial manner as provided in this general permit.
- (3) Unless otherwise limited, manure, sludge, or wastewater may be discharged from a LMU or a RCS into or adjacent to water in the state from a CAFO authorized under this general permit resulting from any of the following conditions:
  - (i) a discharge of manure, sludge, or wastewater that the permittee cannot reasonably prevent or control resulting from a catastrophic condition other than a rainfall event;
  - (ii) overflow of manure, sludge, or wastewater from a RCS resulting from a chronic/catastrophic rainfall event; or
  - (iii) a discharge from a LMU that occurs because the permittee takes measures to de-water the RCS in accordance with Part III.A.10(b), relating to imminent overflow due to chronic/catastrophic rainfall.
- (4) There shall be no discharge of wastewater from the production area into surface water in the state from new source poultry, swine, or veal CAFOs. Wastewater must be contained in RCSs properly, designed, constructed, operated, and maintained according to the provisions of this general permit.

### (b) Numeric Effluent Limitations for Duck CAFOs

No discharge from a duck CAFO shall exceed the following numeric effluent limitations for any discharge to surface water in the state.

Table 1: Numeric Effluent Limitations for Duck CAFOs

Parameter	<sup>1</sup> Daily Maximum Limitation	<sup>1</sup> Monthly Average Limitation	<sup>2</sup> Daily Maximum Limitation	<sup>2</sup> Monthly Average Limitation	Sample Types <sup>5</sup>	Sample Frequency <sup>3</sup>
BOD <sub>5</sub>	3.66	2.0	1.66	0.91	Grab	1/day
Fecal Coliform	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	Grab	1/day

<sup>1</sup>Pounds per 1000 Ducks.

<sup>2</sup>Kilograms per 1000 Ducks.

<sup>3</sup>Sample shall be taken within the first 30 minutes following the initial discharge from a storm event and then once per day while discharging.

<sup>4</sup>Not to exceed MPN of 400 per 100 ml.

<sup>5</sup>a sample which is taken from a waste stream on a one-time basis without consideration of the flow rate of the waste stream and without consideration of time.

General Permit No. TXG920000 for Concentrated Animal Feeding Operations

(c) Monitoring Requirements for all CAFOs

The permittee shall sample all discharges to surface water in the state from RCSs and LMUs. The effluent shall be analyzed by a National Environmental Laboratory Accreditation Conference (NELAC) accredited lab and National Environmental Laboratory Accreditation Program (NELAP) (30 TAC Chapter 25) for the following parameters:

Table 2: Monitoring Requirements for All CAFOs

Parameter	Sample Type	Sample Frequency <sup>1</sup>
BOD <sub>5</sub>	Grab	1/event
<i>Escherichia Coli (E. coli)</i>	Grab	1/event
Total Dissolved Solids (TDS)	Grab	1/event
Total Suspended Solids (TSS)	Grab	1/event
Nitrate (N)	Grab	1/event
Ammonia Nitrogen	Grab	1/event
Total Phosphorus	Grab	1/event
Pesticides <sup>2</sup>	Grab	1/event

<sup>1</sup>Sample shall be taken within the first 30 minutes following the initial discharge.

<sup>2</sup>Any pesticide which the permittee has reason to believe could be present in the wastewater.

(d) Analytical results from the numeric effluent limitations or monitoring requirements must be summarized, documented in the PPP, and reported according to Part IV.B.5 and 6. If the permittee is unable to collect samples due to climatic conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms), the permittee must document why discharge samples could not be collected. Once dangerous conditions have passed, the permittee shall conduct the sampling and analyses required by Part III.A.5(c). In the event that a discharge occurs outside of the normal business hours of the testing laboratory, which causes the maximum hold time to lapse, the permittee shall collect a secondary sample from the RCS, and have it analyzed on the first business day for each parameter where the maximum hold time is exceeded.

6. Retention Control Structure (RCS) Design and Construction

(a) Certification

(1) The permittee constructing a new or modifying an existing RCS shall ensure that all design and completed construction is certified by a licensed Texas Professional Engineer prior to use. The certification shall be signed and sealed in accordance with Texas Board of Professional Engineers requirements.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (2) Documentation of liner and capacity certifications by a licensed Texas Professional Engineer must be completed for each RCS prior to use and must be kept in the PPP.

### (b) Design and Construction Standards

Each RCS, at a minimum, shall be designed and constructed in accordance with the technical standards developed by the NRCS, ASABE, American Society of Civil Engineers, or ASTM International, or other technical standards approved by the Executive Director, that are in effect at the time of construction. Where site-specific variations are warranted, a licensed Texas Professional Engineer shall document these variations and their appropriateness to the design.

### (c) RCS Drainage Area

- (1) The drainage area shall be designed and maintained to minimize entry of uncontaminated runoff into RCSs. Uncontaminated runoff not diverted must be included in the RCS design calculations.
- (2) Stormwater runoff must be diverted from contact with feedlots and holding pens, and manure or process wastewater storage systems. In cases where it is not feasible to divert stormwater runoff from the production area, the retention structures shall include adequate storage capacity for the additional stormwater runoff. Stormwater runoff includes rain falling on the roofs of facilities where the animals are contained within the production area, runoff from adjacent land, or other sources.
- (3) The drainage area shall be designed and maintained to minimize ponding or puddling of water outside the RCS.

### (d) RCS Sizing

The operator of the CAFO shall design, construct, operate, and maintain RCSs to contain all volumes required by this section including the runoff and direct precipitation from the design rainfall event for the location of the facility. The RCS design plan must document the sources of information, assumptions and calculations used in determining the appropriate volume capacity of the RCSs. For all new construction and for all structural modifications of existing RCSs, each RCS shall be designed for the authorized number of animals and include the storage for the volumes listed below:

#### (1) Design Rainfall Event Runoff

- (i) New source swine, veal, or poultry CAFOs subject to the new source performance standards in 30 TAC §321.38(e)(7)(B) must have a RCS designed and constructed such that no discharge occurs in accordance with the following:

- (A) An evaluation of the adequacy of the designed RCS using the most recent version of the Soil Plant Air Water (SPAW) Hydrology Tool or other tool approved by the Executive Director. The evaluation must include all inputs to SPAW including, but not limited to, daily

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

precipitation, temperature, and evaporation data for the previous 100 years, user-specified soil profiles representative of the LMUs, planned crop rotations consistent with the NMP, and the final modeled result of no discharges from the designed RCS. For those CAFOs where 100 years of local weather data is not available, a simulation with a confidence interval analysis conducted over a period of 100 years may be used.

- (B) Provisions for upset/bypass, as defined in Section I of this general permit apply to a new source subject to this provision.
- (C) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, operating logs, or other relevant evidence that:
  - a. An upset occurred, and that the permittee can identify the cause(s) of the upset; and
  - b. The permitted facility was at the time being properly operated in accordance with this general permit.
- (ii) All other CAFOs shall have a RCS designed and constructed to meet or exceed the capacity required to contain the runoff and direct precipitation from the 25-year, 24-hour rainfall event.
- (iii) For all CAFOs the design rainfall event volume shall include the runoff volume from all open lot surfaces, the runoff volume from all areas between open lot surfaces that is directed into the RCSs, the volume of rainfall from any roofed area that is directed into the RCSs, and the volume of direct rainfall on the surface of the RCSs.
- (2) Manure and Process Generated Wastewater. The RCS shall be designed to contain all manure entering the RCS and process generated wastewater produced during a minimum 21-day period as well as wastewater from any cooling pond located within the drainage area of the RCS.
- (3) Sludge. The RCS shall be designed to contain the estimated storage volume for a minimum one year of sludge accumulation.
- (4) Wastewater Treatment. For CAFOs authorized under the air standard permit in 30 TAC Chapter 321.43 (relating to Air Standard Permit for Animal Feeding Operations (AFOs)), the RCS shall be designed to contain any additional volume required for the design and treatment specifications or other options available related to the Air Standard Permit for Animal Feeding Operations.
- (5) Hydrologic Needs Analysis (Water Balance) for Systems Using Irrigation

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

The RCS shall be designed for the authorized number of animals to include any storage volume required by a water balance that documents that the typical irrigation demands of the proposed crop and irrigated land area will not be exceeded. Precipitation inputs to the water balance shall be the average monthly precipitation taken from a National Weather Service current publication. The consumptive use requirements of the cropping system shall be developed on a monthly basis, and shall be calculated as a part of the water balance. The maximum required storage value calculated by the water balance shall not be maintained in the required storage volume for the design rainfall event. Wastewater application rates used in the water balance shall not induce uncontrolled runoff or create tailwater that causes a discharge. All relevant volumes accumulated during the storage period shall be considered in determining the water balance, including all of the following:

- (i) the volumes identified in Part III.A.6(d)(1) through (4);
  - (ii) the storage volume required to contain all wastewater and runoff during periods of low crop demand;
  - (iii) the evaporation volume from RCS surfaces;
  - (iv) the volume applied to crops in response to crop demand; and
  - (v) any additional storage volume required as a safety measure as determined by the RCS designer.
- (6) Evaporation Systems. Evaporation systems shall be designed:
- (i) to withstand a ten-year (consecutive) period of maximum recorded monthly rainfall (other than catastrophic). In any month that a catastrophic event occurs, the analysis shall replace such an event with not less than the long-term average rainfall for that month, as determined by a hydrologic needs analysis (water balance), and
  - (ii) to maintain sufficient volume to contain the volume of rainfall and rainfall runoff from the design rainfall event without overflow. The depth for this volume must be at least one vertical foot allocated within the RCS above the volume required in item (i) above.
- (e) Irrigation Equipment Design
- The permittee shall ensure that the irrigation system design is capable of removing wastewater from the RCS(s). RCS(s) shall be equipped with irrigation, or wastewater removal systems capable of dewatering the RCS(s) whenever needed to restore the operating capacity. Dewatering equipment shall be maintained in proper working order.
- (f) Embankment Design and Construction
- For RCSs where the depth of water impounded against the embankment at the spillway elevation is three feet or more, the RCSs are considered

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

to be designed with an embankment. The PPP shall include a description of the design specifications for the RCS embankments. The following design specifications are required for all new construction and/or the modified portions of existing RCSs.

- (1) Soil Requirements. Soils used in the embankment shall be free of foreign material such as rocks larger than 4 inches, trash, brush, and fallen trees.
- (2) Embankment Lifts. The embankment shall be constructed in lifts or layers no more than eight inches compacted to six inches thick at a minimum compaction effort of 95% Standard Proctor Density (ASTM D698) at -1% to +3% of optimum moisture content.
- (3) Stabilize Embankment Walls. All embankment walls shall be stabilized to prevent erosion or deterioration.
- (4) Compaction Testing. Embankment construction must be accompanied by certified compaction tests including in place density and moisture in accordance with ASTM D 1556, D 2167 or D 2937 for density and D 2216, D 4643, D 4944 or D 4959 for moisture, and D 2922 or D 6938 for moisture and density, or equivalent testing standards.
- (5) Spillway or Equivalent Protection. Additional protection for new or modified portions of existing RCS(s) that are constructed with embankments designed to contain runoff from a drainage area shall be constructed with a spillway or other outflow device properly sized according to NRCS design and specifications to protect the integrity of the embankments.
- (6) Embankment Protection. For all new construction or the modified portions of existing RCSs, each RCS must have a minimum of 2 vertical feet of freeboard constructed with materials equivalent to those used at the time of design and construction between the top of the embankment and the structure's spillway. RCSs without spillways must have a minimum of 2 vertical feet of freeboard between the top of the embankment and the required storage capacity.

### (g) Liner Requirements

For all new construction and for all structural modifications of existing RCS(s), each RCS must demonstrate the lack of hydrologic connection or a liner is required that complies with paragraph (2), (3), or (4) below.

- (1) Lack of Hydrologic Connection
  - (i) Documentation must show that there will be no significant leakage from the RCS(s); or that any leakage from the RCS(s) will not migrate to water in the state. The lack of hydrologic connection documentation shall be certified by a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist and must include information on the hydraulic conductivity and thickness of the natural materials underlying

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

and forming the walls of the containment structure up to the wetted perimeter.

- (ii) If it is claimed that no significant leakage would result from the use of in-situ materials, documentation must be provided that leakage will not migrate to waters in the state. The permittee must, at a minimum, include maps showing groundwater flow paths, or that the leakage enters a confined environment. The permittee shall also include a written determination by an NRCS engineer, licensed Texas Professional Engineer, or licensed Texas Professional Geoscientist that a liner is not needed to prevent a significant hydrologic connection between the contained wastewater and water in the state.
- (2) RCS Liner using In-situ Material

In-situ material is undisturbed, in-place, native soil material. In-situ materials must at least meet the minimum criteria for hydraulic conductivity and thickness as described in Part III.A.6(g)(3). Samples shall be collected and analyzed in accordance with Part III.A.6(g)(5). The calculated specific discharge through the in-situ material must meet the requirements of Part III.A.6(g)(3). This documentation must be certified by a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist.
  - (3) Constructed or Installed Earthen Liner
    - (i) Constructed or installed liners must be designed by a licensed Texas Professional Engineer. The liner must be constructed in accordance with the design and certified as such by a licensed Texas Professional Engineer. Compaction tests and post construction sampling and analyses, conducted in accordance with Part III.A.6(g)(5), will provide support for the liner certification.
    - (ii) Liners shall be designed and constructed to have hydraulic conductivities no greater than  $1 \times 10^{-7}$  centimeters per second (cm/sec), with a thickness of 18 inches or greater or its equivalency in other materials, and not to exceed a specific discharge through the liner of  $1.1 \times 10^{-6}$  cm/sec calculated using Darcy's Law with a water level at spillway depth.
    - (iii) Constructed or installed liners must be designed and constructed to meet the soil requirements, lift requirements, and compaction testing requirements as listed in Part III.A.6(f)(1), (2), and (4).
  - (4) Geosynthetic Liners

Geosynthetic liners that meet the specific discharge standard in Part III.A.6(g)(3) are acceptable if certified by a licensed Texas Professional Engineer. Documentation must be presented to the Executive Director for review and approval before putting into service. Installation of the liner shall be certified by a licensed

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

Texas Professional Engineer that the liner and subgrade were completed according to the manufacturer's recommendations and current standards. Seams shall be completed in accordance with the manufacturer's requirement. When wedge weld seams are used, non-destructive seam testing shall be conducted on the complete length of the wedge weld by standard air pressure testing. The certification must document compliance with all of the following standards: ASTM D 5888 Storage and Handling of Geosynthetic Clay liners, ASTM D 5889 Quality Control of Geosynthetic Clay Liners, and ASTM D 6102 Guide for Installation of Geosynthetic Clay Liners.

### (5) Liner Sampling and Analyses of In-Situ Material or Earthen Liners

- (i) The licensed Texas Professional Engineer or licensed Texas Professional Geoscientist shall use best professional practices to ensure that corings or other liner samples will be appropriately plugged with material that also meets liner requirements of this subsection.
- (ii) Samples shall be collected in accordance with ASTM D 1587 or other method approved by the Executive Director. For each RCS, a minimum of two core samples shall be collected from the bottom of the RCS and a minimum of one core sample shall be collected from each sidewall. Additional samples may be necessary based on the best professional judgment of the licensed Professional Engineer. Distribution of the samples shall be representative of liner characteristics, and proportional to the surface area of the sidewalls and floor. Documentation shall be provided identifying the sample locations with respect to the RCS liner.
- (iii) For earthen liners, undisturbed samples shall be analyzed for hydraulic conductivity in accordance with ASTM D 5084, whole pond seepage analysis as described in ASABE Paper Number 034130, Double Ring Infiltrometer (stand pipe), or other method approved by the Executive Director.

### (6) Leak Detection System

If notified by the Executive Director that significant potential exists for the adverse impact of water in the state or drinking water from leakage of the RCS, the permittee shall install a leak detection system or monitoring well(s) in accordance with that notice. Documentation of compliance with the notification must be kept with the PPP, as well as copies of all sampling data.

## 7. Cooling Pond

For the purposes of this permit, cooling ponds are not RCSs. The requirements of this paragraph are not applicable to cooling ponds located outside the production area. The cooling ponds located within the drainage area of a RCS and cooling pond wastewater must be directed to and contained in a RCS or land applied in accordance with the NMP. The RCS



## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

must be designed with additional capacity to contain the cooling pond wastewater.

- (a) Cooling pond located within the production area of a CAFO shall be designed and maintained as follows:
  - (1) The bottom, entry way and exit ramps shall be constructed of concrete.
  - (2) Water removed from the cooling pond is wastewater and must be managed accordingly.
- (b) Once per calendar year, the operator shall inspect the concrete floor in the cooling pond for cracks and leaks. Cracks and leaks must be repaired prior to refilling and use.

### 8. Special Considerations for Existing RCSs

#### (a) Proper Construction

Any existing RCS that has been properly maintained without any modifications and shows no sign of structural problems or leakage is considered to be properly designed and constructed with respect to the RCS sizing, embankment design and construction, and liner requirements of this permit, provided that any required documentation was completed in accordance with the requirements at the time of construction. If no documentation exists, the RCS must be certified by a licensed Texas Professional Engineer as providing protection equivalent to the requirements of this permit.

#### (b) Playas

A playa that is in use as a RCS, as allowed by Texas Water Code §26.048, and that shows no signs of leakage, is considered to satisfy all applicable design and construction requirements. Playas that meet this requirement are not subject to the five-year liner maintenance review required by Part III.A.10(g).

#### (c) NRCS Plans

Any RCS built in accordance with site-specific NRCS plans and specifications are considered to be in compliance with the design and capacity requirements of this permit provided: 1) the site-specific conditions are the same as those used by the NRCS to develop the plan (numbers of animals, runoff area, wastes generated, etc.) and 2) the RCS has been operated and maintained in accordance with the NRCS requirements.

### 9. Manure and Sludge Storage

- (a) Manure and sludge storage capacity requirements shall be based on manure and sludge production, land availability, and NRCS or equivalent standards.
- (b) Manure or sludge stored for more than 30 days must be stored within the drainage area of a RCS or stored in a manner (i.e. storage shed, bermed area, tarp covered area, etc.) that otherwise prevents contaminated stormwater runoff from the storage area. All storage sites

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

and structures located outside the drainage area shall be designated on the LMU map. Storage for more than 30 days is prohibited in the 100-year floodplain.

- (c) Temporary storage of manure or sludge shall not exceed 30 days and is allowed only in LMUs or a RCS drainage area. Temporary storage of manure and sludge in the 100-year flood plain, near water courses or near recharge features is prohibited unless protected from inundation and damage that may occur during the 100-year flood event. Contaminated runoff from manure or sludge storage piles must be retained on site.

### 10. RCS Operation and Maintenance

- (a) Wastewater Levels. The following requirements must be met for dewatering the RCS, unless the system is designed as an evaporation system in accordance with Part III.A.6(d)(6):
  - (1) The permittee shall ensure that the required capacity in the RCS is available to contain rainfall and rainfall runoff from the design rainfall event. The permittee shall restore such capacity after each rainfall event or accumulation of manure or process generated wastewater that reduces such capacity, when conditions are favorable for irrigation. Favorable conditions shall be when the soil moisture level decreases and irrigation will not cause runoff.
  - (2) The normal operating wastewater level in the RCS shall be maintained in accordance with the design of the RCS. If the water level in the RCS encroaches into the storage volume reserved for the design rainfall event (25-year, 24-hour or no discharge for new source swine, veal or poultry) the pollution prevention plan must document the conditions that resulted in this occurrence. As soon as irrigation is allowed, the permittee shall irrigate until the water level is at or below the design rainfall level.

- (b) Imminent Overflow

If a RCS is in danger of imminent overflow from chronic or catastrophic rainfall or catastrophic conditions, the permittee shall take reasonable steps to irrigate wastewaters to LMUs only to the extent necessary to prevent overflow from the RCS. If irrigation results in a discharge from the LMU, the permittee shall collect samples from the drainage pathway at the point of discharge from the LMU and analyze the samples in accordance with Part III.A.5(c), and provide the appropriate notifications in Part IV.B.

- (c) Permanent Pond Marker

The permittee shall install and maintain a permanent pond marker in the RCS, visible from the top of the embankment that identifies, either physically or by documentation in the PPP, the volume required for the design rainfall event and minimum treatment volume, if necessary.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

(d) Rain Gauge

A rain gauge capable of measuring the design rainfall event shall be kept on site and properly maintained.

(e) Sludge Removal

Sludge shall be removed from the RCS in accordance with the design schedule for cleanout to prevent the accumulation of sludge from encroaching on the volumes reserved for minimum treatment, if necessary, and the design rainfall event.

(f) Liner Protection and Maintenance

(1) The permittee shall maintain the liner to inhibit infiltration of wastewaters.

(2) Liners must be protected from animals by fences or other protective devices.

(3) No tree shall be allowed to grow such that the root zone would intrude or compromise the structure of the liner or embankment.

(4) Any mechanical or structural damage to the liner shall be evaluated by a licensed Texas Professional Engineer within 30 days following discovery of the damage.

(5) For re-certification of an earthen liner following the repair of mechanical or structural damage, a minimum of one sample shall be collected from the repaired area and analyzed to document that the liner meets the requirements of the liner certification for that RCS prior to the damage.

(g) Documentation of Liner Maintenance

The permittee shall have a licensed Texas Professional Engineer review the liner documentation and do site evaluation every five years.

### 11. General Operating Requirements

(a) Flush/Scrape Systems. CAFOs designed with flush/scrape systems shall be flushed/scraped in accordance with design criteria.

(b) Pen Maintenance. Earthen pens shall be designed and maintained to ensure good drainage and minimize ponding.

(c) Carcass Disposal

Carcasses shall be collected within 24 hours of death and properly disposed of within three (3) days of death in accordance with the Texas Water Code Chapter 26, Texas Health and Safety Code Chapter 361, and 30 TAC Chapter 335 (relating to Industrial Solid Waste and Municipal Hazardous Waste) unless otherwise provided for by the Commission. Animals must not be disposed of in any liquid manure or process wastewater system. Disposal of diseased animals shall also be conducted in a manner that prevents a public health hazard in accordance with Texas Agriculture Code §161.004 and 4 TAC §§31.3, 58.31(b) and 59.12. The collection area for carcasses shall be addressed in the potential pollutant sources section of the PPP with management

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

practices to prevent contamination of surface or groundwater; control access; and minimize odors.

### 12. Land Application

#### (a) Nutrient Management Plan (NMP)

A permittee authorized as a Large CAFO must implement the NMP developed in accordance with the Texas NRCS Practice Standard Code 590 which has been approved by the ED. The NMP shall be updated annually to incorporate the most recent manure, sludge, wastewater, and soil analyses. The NMP shall be certified by an individual or employee of an entity identified in Part III.A.14(b) of this general permit.

#### (b) Terms of the Nutrient Management Plan. The terms of the NMP include the following:

- (1) Authorized animal type(s) and head count;
- (2) Land management unit (LMU) and application acreage for each LMU;
- (3) Crops (including alternative crops) identified in the NMP with their yield goals for each LMU;
- (4) The maximum application rates for nitrogen (N) and phosphorus (P) for each crop in each LMU; and
- (5) The methodology in **Appendix I** of this permit (including formulas, sources of data, protocols for making determination, etc.) and actual data that will be used to account for:
  - (i) the results of soil tests required by Parts III.A.13.(c) and (d);
  - (ii) credits for all nitrogen in the field that will be plant-available;
  - (iii) the amount of nitrogen and phosphorus in the manure and wastewater to be applied;
  - (iv) consideration of multi-year phosphorus application (for any field where nutrients are applied at a rate based on the crop phosphorus requirement, the methodology must account for single-year nutrient applications that supply more than the crop's annual phosphorus requirement);
  - (v) all other additions of plant available nitrogen and phosphorus to the field (i.e., from sources other than manure or wastewater or credits for residual nitrogen);
  - (vi) the timing and method of land application;
  - (vii) volatilization of nitrogen and mineralization of organic nitrogen;
  - (viii) The nitrogen and phosphorus recommendations from the S-Crops Table as contained in the Texas NRCS 590 Software Tool, site-specific historic CAFO yield data, or other sources as approved by the Executive Director for each crop identified for each field, including any alternative crops identified; and

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (ix) The outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field;
  - (6) Any other factors necessary to determine the amounts of nitrogen and phosphorus to be applied in accordance with this general permit.
- (c) Land Application Requirements. All permittees must manage LMUs according to the following requirements.
  - (1) Discharge of manure, sludge, or wastewater is prohibited from a LMU and shall not cause or contribute to a violation of surface water quality standards, contaminate groundwater, or create a nuisance condition.
  - (2) Land application shall not occur when the ground is frozen or saturated or during rainfall events unless in accordance with Part III.A.10(b) of this permit.
  - (3) Any land application of manure, sludge, or wastewater shall not exceed the planned crop requirements. Land application rates of manure, sludge or wastewaters shall be based on the total nutrient concentration, on a dry weight basis, where applicable.
  - (4) The land application of manure, sludge, and wastewater at agronomic rates and hydrologic needs shall not be considered surface disposal and is not prohibited.
  - (5) Where manure, sludge, or wastewater is applied in accordance with a site-specific NMP that complies with Part III.A.12(a), precipitation-related runoff from LMUs is authorized as a pollutant discharge if the source is land associated with a CAFO in a major sole-source impairment zone; or an agricultural stormwater discharge for all other sources as defined in 33 U.S.C. §1362 (14).
  - (6) Irrigation practices shall be managed so as to minimize ponding or puddling of wastewater on the site, prevent tailwater discharges to waters in the state, and prevent the occurrence of nuisance conditions.
  - (7) A permittee introducing wastewater or chemicals to water well heads for the purpose of irrigation shall install backflow prevention devices in accordance with requirements contained in 16 TAC Chapter 76 (relating to Water Well Drillers and Water Well Pump Installers) and 30 TAC Chapter 290 (relating to Public Drinking Water), as appropriate.
  - (8) Land application at night shall only be allowed if there is no occupied residence(s) within 0.25 mile from the outer boundary of the actual area receiving manure, sludge, or wastewater application. In areas with an occupied residence within 0.25 mile from the outer boundary of the actual area receiving manure, sludge, or wastewater application, application shall only be allowed from one hour after sunrise until one hour before sunset, unless

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

the current resident owner or lessee of such residences have, agreed in writing to specified nighttime applications.

- (d) **Critical Phosphorus Level.** A permittee shall not land apply any manure, sludge, or wastewater to the LMU except in accordance with Part III.A.14 when results of the annual soil analysis for extractable phosphorus indicate:
  - (1) a level greater than 200 ppm of extractable phosphorus (reported as P) in Zone 1 for a particular LMU; or
  - (2) a level greater than 350 ppm of extractable phosphorus (reported as P) in Zone 1 (zero to six-inch depth) for an LMU where the average annual rainfall is 25 inches or less and erosion control is adequate to keep erosion at the soil loss tolerance (T) or less and the closest edge of the field is more than one mile from a named stream; or
  - (3) if ordered by the Executive Director to do so in order to protect the quality of waters in the state.
- (e) **Land Application without a NMP applicable to State Only CAFOs**

Permittees that are authorized as a State only CAFO under this general permit shall comply with the following land application requirements. Documentation for each LMU must include:

  - (1) The location, description, and limitations contained in the USDA Soil Survey of the predominant soil series within the identified LMUs, and a plan to address the soil limitations;
  - (2) The crop types, realistic yield goals, and rotations to be implemented on an annual basis based on the major soil series within the identified LMUs;
  - (3) The procedures for calculating the application rates;
  - (4) The results of the annual manure, sludge, wastewater, and soil analyses used in determining application rates;
  - (5) Projected rates of application of the manure, sludge, and wastewater in accordance with the crop requirement, as well as all data indicating the nutrients that will be applied to the LMUs; and
  - (6) A description of the type of equipment and method of application to be used in applying the manure, sludge, or wastewater.
- (f) **Buffer Requirements**
  - (1) **Surface Water in the State**

Vegetative buffer strips shall be maintained in accordance with NRCS Practice Standard Code 393. The minimum buffer shall be no less than 100 feet of vegetation to be maintained between all manure, sludge, and wastewater application areas and all surface water in the state. A buffer is not required for wastewater irrigation when applied by low-pressure, low-profile center pivot irrigation systems in areas of the state where the annual average rainfall is

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

less than 25 inches per year. Land application of manure, sludge, and wastewater into surface water in the state is an unauthorized discharge and is prohibited.

### (2) Sink Holes

Manure, sludge, and wastewater may not be applied closer than 100 feet to any sinkhole. Alternatively, the permittee may substitute a 35-foot wide vegetative buffer where 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 buffer.

### (3) Impaired Water Bodies

For LMUs located within 200 feet of a main stem of an impaired segment listed on the current EPA approved Clean Water Act §303(d) list of impaired water bodies, for bacteria, nutrients or pathogens, the permittee must, comply with the following requirements:

- (i) Land application must be consistent with a NMP certified in accordance with NRCS Practice Standard Code 590 using the phosphorus index rating for impaired waters. The phosphorus index rating must be calculated using the NRCS Phosphorus Assessment Tool for Texas, Agronomy Technical Note Number 15.
- (ii) The permittee shall install and maintain one of the following buffers between the land application area and the main stem of the impaired segment:
  - (A) a 200-foot vegetative buffer; or
  - (B) a 100-foot vegetative buffer and a filter strip or vegetative barrier, as defined by NRCS Practice Standard Codes 393 or 601.

## 13. Sampling and Testing

### (a) Initial Sampling. Before commencing application of manure, sludge or wastewater on LMUs, the permittee shall:

- (1) collect and analyze at least one representative sample of manure, sludge (if applicable), and wastewater for total nitrogen, total phosphorus, and total potassium; and
- (2) collect and analyze at least one representative soil sample from each LMU according to the procedures in this subsection. For LMUs that have not received manure, sludge, or wastewater within the previous year, initial sampling must be completed before re-starting land application to the LMU.

### (b) Annual Sampling

- (1) A permittee shall collect soil samples and have them analyzed for each LMU where manure, sludge, or wastewater was applied during the preceding year according to the procedures in this subsection.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

For LMUs where manure, sludge, or wastewater was not applied during the preceding year, a permittee is not required to collect and analyze soil samples. However, the annual reporting requirement in Part IV.B.1. of this general permit must be met.

- (2) At least one representative sample of manure, sludge, and wastewater shall be collected and analyzed annually for total nitrogen, total phosphorus, and total potassium.

### (c) Soil Sampling Procedures

Sampling procedures shall employ the following accepted techniques of soil science for obtaining representative samples and analytical results.

- (1) Samples shall be collected using approved methods described in the TCEQ's guidance document RG-408 entitled "Soil Sampling for Concentrated Animal Feeding Operations."
- (2) Samples shall be collected by the permittee or their designee and analyzed by a soil testing laboratory annually, except when crop rotations or inclement weather require a change in the sampling time. The PPP shall contain documentation to explain the reasons for adjusting the sampling timeframe.
- (3) Obtain one composite sample for each LMU and per uniform soil type (soils with the same characteristics and texture) within the LMU.
- (4) Composite samples shall be comprised of 10 - 15 randomly sampled cores at a depth of zero to six (0 - 6) inches.

### (d) Soil Analysis. The permittee shall have a laboratory analysis of the soil samples performed for physical and chemical parameters to include:

- (1) nitrate reported as nitrogen in ppm;
- (2) phosphorus (extractable, ppm) - (Mehlich III extractant and inductively coupled plasma (ICP) analysis);
- (3) potassium (extractable, ppm);
- (4) sodium (extractable, ppm);
- (5) magnesium (extractable, ppm);
- (6) calcium (extractable, ppm);
- (7) soluble salts (ppm) /electrical conductivity (dS/m) - determined from extract of 2:1 (v/v) water/soil mixture; and
- (8) soil water pH (soil:water, 1:2 ratio).

## 14. Nutrient Utilization Plan (NUP) Applicable to State- only CAFOs

CAFOs that are authorized as State only are required to comply with this section of the GP. If the soil test for a LMU shows a phosphorus (P) level of 200 ppm or greater, a NMP, based on crop removal, certified in accordance with the NRCS Practice Standard Code 590 complies with the requirements for an effective NUP.



## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (a) A permittee shall not land apply any manure, sludge, or wastewater to the LMU except in accordance with a detailed NUP when results of the annual soil analysis for extractable phosphorus indicate:
  - (1) a level greater than 200 ppm of extractable phosphorus (reported as P) at a depth of zero to six (0 - 6) inches for a particular LMU; or
  - (2) a level greater than 350 ppm of extractable phosphorus (reported as P) at a depth of zero to six (0 - 6) inches for an LMU where the average annual rainfall is 25 inches or less and erosion control is adequate to keep erosion at the soil loss tolerance (T) or less and the closest edge of the field is more than one mile from a named stream; or
  - (3) if ordered by the Executive Director to do so in order to protect the quality of waters in the state.
- (b) The NUP must be developed and certified by:
  - (1) an employee of the NRCS;
  - (2) a Certified Nutrient Management Specialist;
  - (3) the Texas State Soil and Water Conservation Board;
  - (4) the Texas AgriLife Extension Service;
  - (5) an agronomist or soil scientist on full-time staff at an accredited university located in the State of Texas; or
  - (6) if the Executive Director determines that one of the entities listed in (1) - (5) cannot develop the plan in a timely manner, a Certified Professional Agronomist certified through the certification program of the American Society of Agronomy, a Certified Professional Soil Scientist certified through the certification program of the Soil Science Society of America, or a Texas licensed Geoscientist-Soil Scientist in Texas may develop the NUP with Executive Director approval.
- (c) The NUP must be submitted to and approved by the Executive Director prior to land application of manure, sludge, or wastewater to the affected LMU.
- (d) Land application under the terms of the NUP may resume 30 days after the plan is filed with the Executive Director, unless before that time the Executive Director has returned the plan for failure to comply with the requirements of this general permit.
- (e) Land application under an approved NUP shall not cause or contribute to a violation of water quality standards or create a nuisance.
- (f) The permittee shall ensure that the NUP, at a minimum, evaluates and addresses the following factors to assure that the beneficial use of manure, sludge, or wastewater is conducted in a manner that prevents phosphorus impacts to water quality:
  - (1) slope of the LMU (as a percentage) and distance of the land management unit from surface water in the state;

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (2) average rainfall for the area for each month;
- (3) the permeability of the most restrictive layer in the upper 24 inches of each LMU profile, and the available water holding capacity of the upper 24 inches of the predominant soil in each LMU;
- (4) chemical characteristics of the waste, including total nitrogen and total phosphorus;
- (5) recommended rates, methods, and schedules of application of manure, sludge, and wastewater for all LMUs;
- (6) crop types, annual crop removal rate, and expected realistic yield for each crop; and
- (7) BMPs to be used to prevent phosphorus impacts to water quality, including any physical structures and vegetative filter strips.

### 15. Preventative Maintenance Program

#### (a) Facility Inspections

##### (1) General Requirements

- (i) The permittee shall conduct weekly inspections of the control facility and land application equipment to determine preventative maintenance or repairs that are needed. Permittees that do not use a RCS are required to conduct inspections for applicable portions of their operation according to the outlined schedule.
  - (ii) Inspections shall include visual inspections and equipment testing to uncover conditions that could cause breakdowns or failures resulting in discharge of pollutants into or adjacent to water in the state or the creation of a nuisance condition.
  - (iii) The PPP shall document the inspections and that appropriate action has been taken in response to deficiencies identified during the inspection. The record documenting significant observations and the date of the observation shall be made available during inspections and shall be retained in the PPP. A permittee that does not correct all the deficiencies within 30 days must submit to the Executive Director an explanation of the factors that prevented the correction of the deficiencies.
- (2) Daily inspections must be conducted on all water lines that are located within the drainage area of the RCS. These daily inspections should be recorded in the PPP either daily or in the weekly report.
  - (3) Weekly inspections must be conducted on:
    - (i) all control facilities and wastewater levels in the RCS; and
    - (ii) equipment used for land application of manure, sludge, and/or wastewater.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (4) Monthly inspections must be conducted on:
  - (i) mortality management systems, including containers, burial sites, composting facilities, incinerators; and
  - (ii) location of chemical storage and disposal, including pesticide containers.
- (5) Annual Site Inspection
  - (i) A complete site inspection of the CAFO and LMUs shall be conducted and documentation of the findings of the inspection made at least once per year.
  - (ii) The inspection shall include:
    - (A) a review of the list of potential pollutant sources to ensure it is current;
    - (B) the inspection of all controls and operations outlined in the PPP to reduce the potential for pollutants to be transported off the CAFO; and
    - (C) updating the PPP to reflect current conditions.

(b) Five Year Evaluation of the RCS(s)

Once every five years, any permittee who uses an RCS shall have a licensed Texas Professional Engineer review the existing engineering documentation, complete a site evaluation of the structural controls, and review existing liner documentation. The engineer shall complete and certify a report of their findings that must be kept with the PPP.

### 16. Management Documentation

The following documentation shall be retained by the permittee as part of the PPP and must be submitted to the Executive Director within five business days of a written request.

- (a) Spill Prevention and Recovery
  - (1) The permittee shall take appropriate measures necessary to prevent spills and to clean up spills of any toxic pollutant. Where potential spills can occur; materials, handling procedures, and storage shall be specified. The permittee shall identify the procedures for cleaning up spills and shall make available the necessary equipment to personnel to implement a clean-up.
  - (2) The permittee shall store, use, and dispose of all pesticides in accordance with label instructions.
  - (3) There shall be no disposal of pesticides, solvents or heavy metals, or of spills or residues from storage or application equipment or containers, into RCSs. Incidental amounts of such substances entering an RCS as a result of stormwater transport of properly applied chemicals is not a violation of this general permit.
- (b) Groundwater Monitoring Plan
  - (1) A groundwater monitoring plan shall be implemented by a permittee if:

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (i) a playa is used as a RCS, as allowed by Texas Water Code §26.048, or
    - (ii) if required by the Executive Director.
  - (2) The groundwater monitoring plan shall specify procedures for:
    - (i) annually collecting a groundwater sample from each well that provides water for the facility;
    - (ii) having each sample analyzed for nitrate as nitrogen and chloride where a groundwater monitoring plan is required by (b)(1)(i), and for nitrate as nitrogen, total dissolved solids, and chloride, where a groundwater monitoring plan is required by (b)(1)(ii), and
    - (iii) comparing the analytical results to the baseline data.
  - (3) Data from any required groundwater monitoring must be submitted to the Executive Director annually and kept on site for five years with the PPP. The first year's sampling shall be considered the baseline data and must be retained on site for the life of the facility unless otherwise provided by the Executive Director.
  - (4) The groundwater monitoring plan required by Part III.A.16(b)(1)(ii) shall be developed and certified by a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist.
- (c) The permittee shall maintain a copy of the following documents in this section of the PPP, or if stored in other locations including binders, files, and electronic records, make them readily available during the course of an inspection or at the request of the Executive Director:
  - (1) the recharge feature certification;
  - (2) the NMP or NUP, as applicable;
  - (3) the liner certifications or lack of hydrologic connection certification;
  - (4) any written agreement with a landowner which documents the allowance of nighttime application of manure, sludge, or wastewater, as required by Part III.A.12.(c)(8);
  - (5) the odor control plan, if required by the Air Standard Permit;
  - (6) all employee training documentation, including dates when training occurred and, for DOPA required training, verification of the date, time of attendance, and completion of training;
  - (7) the administratively complete and technically complete notice of intent and applicable attachments;
  - (8) the written authorization issued by the Commission or Executive Director;
  - (9) all NOCs submitted to the Executive Director;
  - (10) all closure plans and post-closure documentation; and

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

(11) this general permit.

### **B. General Requirements**

1. For any new or expanding CAFO, the permittee shall not construct any component of the production area in any stream, river, lake, wetland, or playa (except as defined by and in accordance with the Texas Water Code §26.048 - Prohibition of Discharge to a Playa from a CAFO).
2. Animals confined on the CAFO shall be restricted from coming into direct contact with surface water in the state through the use of fences or other controls.
3. The permittee shall prevent the discharge of pesticide contaminated waters into surface water in the state. All wastes from dipping vats, pest and parasite control units, vehicle wash, disinfection stations and other facilities used for the application of potentially hazardous or toxic chemicals shall be handled and disposed of in a manner that prevents any significant pollutants from entering water in the state or creating a nuisance condition. All pesticides shall be stored, used, and disposed of in accordance with label instructions. There shall be no disposal of pesticides, solvents or heavy metals, or of spills or residues from storage or application equipment or containers, into RCSs. Incidental amounts of such substances entering a RCS as a result of stormwater transport of properly applied chemicals is not a violation of this general permit.
4. Composting on-site at a CAFO shall be performed in accordance with 30 TAC Chapter 332. CAFOs may compost manure and dead animals generated on-site. Pursuant to 30 TAC Chapter 332, the permittee may add agricultural products to provide an additional carbon source or bulking agent to aid in the composting process. If the compost areas are not roofed or covered with impermeable material, protected from external rainfall, or bermed to protect from runoff in the case of the design rainfall event, the compost areas must be located within the drainage of the RCS and must be shown on the site map and accounted for in the RCS design calculations.
5. CAFOs that maintain animals in pastures, must maintain crops, vegetation, forage growth, or post-harvest residues in the normal growing season, excluding the feed or water trough areas.
6. CAFOs shall be operated in such a manner as to prevent nuisance conditions of air pollution as mandated by Texas Health and Safety Code, Chapters 341 and 382.
7. The permittee shall take reasonable steps necessary to prevent adverse effects to human health or safety, or to the environment.
8. The permittee shall maintain control of the RCS(s), required LMUs, and control facilities identified on the site map submitted with the NOI. In the event the permittee loses ownership or possession of any of these areas, the permittee shall notify the Executive Director within 5 business days and file a NOC.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

### C. Training

1. Employee Training
  - (a) CAFO employees who are responsible for work activities relating to compliance with provisions of this general permit must be regularly trained or informed of any information pertinent to the proper operation and maintenance of the facility and land application of manure, sludge, or wastewater.
  - (b) Employee training shall address all levels of responsibility of the general components and goals of the PPP. Training shall include topics as appropriate such as land application of manure, sludge, or wastewater, proper operation and maintenance of the facility, good housekeeping, material management practices, recordkeeping requirements, and spill response and clean up.
  - (c) Permittees are responsible for determining the appropriate training frequency for different levels of personnel, and the PPP shall identify dates for such training.
2. Operator Training. Dairy CAFO operators shall attend and complete training developed by the Executive Director and the Texas AgriLife Extension if any portion of the production area of the CAFO is located in the following counties: Bosque, Comanche, Erath, Hamilton, Hopkins, Johnson, Rains, or Wood. The training shall consist of the following:
  - (a) an eight-hour course or its equivalent on animal waste management within 12 months of receiving initial authorization for a new CAFO; and
  - (b) at least eight additional hours of continuing animal waste management education or its equivalent for each two-year period after completing the requirements for subsection (2)(a) of this section.

### D. Closure Requirements

1. The permittee shall submit a closure plan to the CAFO Permits Team, Water Quality Division, TCEQ, (MC- 150, P.O. Box 13087, Austin, Texas 78711-3087) and the appropriate TCEQ regional office within 90 days of permanently ceasing operations.
2. The closure plan shall be developed and certified by a licensed Texas Professional Engineer to meet the standards contained in the NRCS Practice Standard 360 (Closures of Waste Impoundments), and use the guidelines contained in the Texas AgriLife Extension/NRCS publication #B-6122 (Closure of Lagoons and Earthen Manure Storage Structures).
3. The RCS or CAFO shall be properly closed within one year of TCEQ receipt of the closure plan. The RCS or CAFO is considered properly closed upon certification by a licensed Texas Professional Engineer that closure is complete according to the closure plan.
4. The permittee shall maintain or renew its existing authorization and maintain compliance with the requirements of this general permit until the RCS or CAFO is properly closed.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

### Part IV. Recordkeeping, Reporting, and Notification Requirements

#### A. Recordkeeping

The permittee shall keep records on-site for a minimum of five years from the date the record was created. Upon written request, any of the records maintained to comply with this permit shall be submitted to the Executive Director within five business days of the permittee receiving the request. The permittee shall include the following in their recordkeeping:

1. Records must be updated daily to include:
  - (a) all measurable rainfall events; and
  - (b) the wastewater levels in the RCS, as shown on the depth marker, shall be recorded whenever the daily rainfall exceeds 1.0 inch.
2. Records must be updated weekly to include:
  - (a) the wastewater levels in the RCS shown on the depth marker; and
  - (b) records of all manure, sludge, and wastewater beneficially used by the CAFO that shows the dates, times, and location of land application or removal from the CAFO.
    - (1) For a CAFO where manure, sludge, or wastewater is applied on LMUs, such records must include the following information:
      - (i) date of manure, sludge, or wastewater application to each field;
      - (ii) location of the specific LMU and the volume or amount applied during each application event;
      - (iii) acreage of each individual crop where manure, sludge, or wastewater is applied;
      - (iv) assumptions for calculating the total amount of nitrogen and phosphorus applied per acre to each field, including the sources of nutrients other than manure, sludge, or wastewater on a dry weight basis, and the percent moisture content of the manure and sludge;
      - (v) the actual annual yield of each harvested crop, and
      - (vi) weather conditions during the land application and 24 hours before and after the land application.
    - (2) If manure, sludge, or wastewater is sold or given to other persons for off-site land application or disposal, such records must include the following information (A single pick-up truck load need not be recorded):
      - (i) date of removal from the CAFO;
      - (ii) name and address of the recipient; and
      - (iii) approximate amount, in wet tons, dry tons, or cubic yards, of manure or sludge or gallons of wastewater or slurry removed from the CAFO.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (3) The permittee must make the most recent nutrient analysis of the manure, sludge, and wastewater available to any hauler.
    - (4) If manure, sludge, or wastewater is being removed by a custom hauler or commercial composter then the records can be updated monthly in accordance with a normal billing cycle.
  3. The permittee shall maintain a written description of mortality management practices.
  4. Records of weekly inspections of all control facilities and equipment used for land application of manure, sludge, and wastewater shall be updated weekly and include the date of the inspection and a description of the findings.
  5. Records pertaining to land application activities must be updated annually to include:
    - (a) annual nutrient analysis for at least one representative sample of irrigation wastewater, if applicable, and one representative sample of manure and sludge for total nitrogen, total phosphorus, and total potassium;
    - (b) the annual soil analysis report; and
    - (c) the inspection report required by Part III.A.15(a)(5).
  6. The inspection report as required by Part III.A.15(b), Five Year Evaluation, must be updated every five years.
  7. The following records shall also be kept on-site:
    - (a) a list of any significant spills at the CAFO;
    - (b) documentation of liner maintenance as required in Part III.A.10(g);
    - (c) groundwater monitoring records, if required by Part III.A.16(b);
    - (d) RCS design and construction certification as required in Part III.A.6(a);
    - (e) embankment certification as required in Part III.A.6(f);
    - (f) liner certification as required in Part III.A.6(g); and
    - (g) a copy of current and amended site plans.

### **B. Reporting and Notification**

1. **Annual Reporting Requirement.** Large CAFOs must submit an annual report with all information required in this section to the appropriate TCEQ regional office and the TCEQ's Office of Compliance and Enforcement, Enforcement Division (MC 224, P.O. Box 13087, Austin, Texas 78711) by March 31 of each year for the 12-month reporting period identified by the permittee. State-only CAFOs must submit items (h), (i) and (o) of this section by the same deadline. The report shall be on forms prescribed by the Executive Director to include, but not limited to:
  - (a) number and type of animals, whether in open confinement or housed under roof;



## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- (b) estimated amount of total manure, sludge, and wastewater generated during the previous 12 months by the CAFO facility;
  - (c) estimated amount of total manure, sludge, and wastewater land applied to each LMU during the previous 12 months on-site at the CAFO facility;
  - (d) estimated amount of total manure, sludge, and wastewater transferred to other persons from the CAFO facility during the previous 12 months;
  - (e) total number of acres for land application covered by the NMP approved by the Executive Director for the CAFO and total number of those acres used in the previous 12 months for land application;
  - (f) summary of discharges of manure, sludge, or wastewater from the production area that occurred during the previous 12 months including dates, times, and approximate volume;
  - (g) a statement that the NMP, under which the CAFO is operating, was developed and certified by a certified nutrient management specialist;
  - (h) groundwater monitoring results, if required by Part III.A.16(b);
  - (i) the annual soil analysis of each sample collected from the LMUs; as required by this general permit. The analysis shall be accompanied by the reporting forms prescribed by the Executive Director;
  - (j) the actual crop(s) planted and yield(s) for each LMU;
  - (k) the actual nitrogen and phosphorus content of manure, sludge or process wastewater that was land applied;
  - (l) the results of data used in calculations and the results of calculations conducted in accordance with **Appendix I**;
  - (m) the results of any soil testing for nitrogen and phosphorus conducted during the previous 12 months;
  - (n) the amount of any supplemental fertilizer applied during the previous 12 months; and
  - (o) any other relevant information deemed necessary by the Executive Director.
2. The permittee shall notify the appropriate TCEQ regional office at least 48 hours prior to:
- (a) putting into operation any new or replacement RCS. For purposes of this general permit, "putting into operation" means the RCS commences the receipt of manure, sludge, or wastewater; and
  - (b) any new construction or modification of control facilities.
3. The permittee shall provide written notice to the appropriate TCEQ regional office as soon as the RCS cleaning is scheduled, but not less than ten business days prior to cleaning. The permittee shall also provide written verification of completion to the regional office within five business days after the cleaning is complete. This paragraph does not apply to cleaning of solid separators, settling basins, or conveyances into the RCS. Removal of sludge shall be conducted during favorable wind conditions that carry odors

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

away from nearby receptors. Any increase in odors associated with a properly managed cleanout under this subsection will be taken into consideration by the Executive Director when determining compliance with the provisions of this general permit.

4. Permittees that are not required to submit an annual report shall furnish to the appropriate TCEQ regional office and the TCEQ's Office of Compliance and Enforcement, Enforcement Division (MC 224, P.O. Box 13087, Austin, Texas 78711) on or before March 31 of each year, soil testing analysis of all soil samples collected in accordance with the requirements of this general permit. The analysis shall be accompanied by reporting forms prescribed by the Executive Director.
5. If, for any reason, there is a discharge to water in the state, the permittee shall notify the Executive Director and appropriate TCEQ regional office orally within 24 hours of becoming aware of the discharge or by the next business day and in writing within 14 business days of becoming aware of such discharge from the RCS or any component of the manure handling or land application system to the Office of Compliance and Enforcement Division (MC 224, P.O. Box 13087, Austin, Texas 78711). In addition, the permittee shall document the following information in the PPP and submit the following items to the appropriate TCEQ regional office:
  - (a) A description and cause of the discharge, including a description of the flow path to the receiving water body and an estimation of the volume discharged.
  - (b) The period of discharge, including exact dates and times, and, if not corrected the anticipated time the discharge is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the discharge.
  - (c) If caused by a precipitation event, the date of the event and the rainfall amount recorded from an on-site rain gauge.
  - (d) Results of analysis as required by Part III.A.5(c).
  - (e) Any upset which exceeds any effluent limitation in the permit.
  - (f) Corrective actions taken to cease the discharge and to prevent recurrence of the discharge.
6. The permittee shall report any noncompliance, other than B.5 above, that may endanger human health or safety, or the environment to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the appropriate TCEQ regional office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the appropriate TCEQ regional office and the TCEQ's Enforcement Division (MC 224, P.O. Box 13087, Austin, Texas 78711) within five (5) business days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times. If the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce,

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

eliminate, and prevent recurrence of the noncompliance and to mitigate its adverse effects.

### **Part V. Standard Permit Conditions**

- A. Authorization to discharge must be obtained prior to the construction of any new CAFO facility as stated in 30 TAC §§321.33(d) and (e). This authorization may be obtained through either this general permit or an individual permit.
- B. The permittee has a duty to comply with all conditions in this general permit and 30 TAC Chapter 321; Subchapter B. Failure to comply with any condition is a violation of the general permit and the statutes under which the general permit was issued. Any violation may be grounds for enforcement action, for terminating coverage under this general permit, or for requiring a permittee to apply for and obtain an individual permit.
- C. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted discharge to maintain compliance with the permit conditions.
- D. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) installed or used by the permittee to achieve compliance with the permit conditions. Proper operation and maintenance also includes adequate laboratory and process controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the permit conditions.
- E. All records, reports, drawings, and other documentation required by this general permit must be maintained for a minimum period of five years from the date of the record and either be kept on-site or made readily available for review by an authorized representative of the Commission upon request. This period may be extended at the request of the Executive Director.
- F. The permittee shall furnish any information, at the written request of the Executive Director, that is necessary to determine whether cause exists for revoking, suspending, or terminating authorization under this permit. The requested information must be provided within a reasonable time frame and in no case later than 30 days from the postmarked date of the request.
- G. The permittee shall give notice to the Executive Director before physical alterations or additions to the permitted facility if such changes would result in a violation of permit requirements.
- H. Inspection and entry shall be allowed under TWC, Chapters 26 through 28 and Texas Health and Safety Code §§361.032-361.033 and 361.037 and 40 Code of Federal Regulations §122.41(i). The statement in TWC §26.014 that Commission entry of a regulated entity shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection is not grounds for denial or restriction of entry to any part of the regulated entity, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- I. Standard monitoring requirements
  1. Samples required by this permit shall be collected and measurements taken at times and in a manner such that they are representative of the monitored discharge or activity. Samples shall be delivered to the laboratory immediately upon collection, in accordance with any applicable analytical method and required maximum holding times. Unless otherwise specified in this permit, all laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
  2. Records of Monitoring activities must include:
    - (a) the date, time, and place of sample or measurement;
    - (b) the identity of any individual who collected the sample or made the measurement;
    - (c) the chain-of-custody procedures used to maintain sample integrity from sample collection to laboratory delivery;
    - (d) the date and time of laboratory analysis;
    - (e) the identity of the individual and laboratory who performed the analysis;
    - (f) the technique or method of analysis; and
    - (g) the results of the analysis or measurement and for wastewater the quality assurance/quality control records.
  3. Chain of custody documents shall be maintained by the permittee or the person that collected the samples on behalf of the permittee and must be made available to the Executive Director upon written request within 30 days of the postmarked date of the request.
  4. The permittee shall ensure that properly trained and authorized personnel monitor and sample the soil or wastewater related to any permitted activity.
- J. NOIs, NOTs, NOCs, and NMPs shall be signed in accordance with the requirements of 30 TAC §305.44(a) (relating to Signatories to Applications). Pollution prevention plans, reports, and other information requested or required by the Executive Director shall be signed in accordance with the requirements of 30 TAC Chapter 305.128 (relating to Signatories to Reports).
- K. Authorization under this permit may be suspended or revoked for the reasons stated in 30 TAC Chapter 205.4 (relating to Authorizations and Notices of Intent). Notifying the TCEQ of planned changes or an anticipated noncompliance, does not stay any permit condition.
- L. This permit does not convey any property rights of any sort or any exclusive privilege.
- M. If the permittee becomes aware that he/she failed to submit any relevant facts in an NOI, or submitted incorrect information in an NOI or in any report to the Executive Director, the permittee shall promptly submit such facts or information.

## General Permit No. TXG920000 for Concentrated Animal Feeding Operations

- N. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Chapter 7 of the Texas Water Code for violations including but not limited to the following:
  - 1. violating the TWC Chapter 26 or applicable rules of the Commission or terms of this general permit;
  - 2. falsifying, tampering with, or knowingly rendering inaccurate any monitoring device or method required to be maintained under a permit; and
  - 3. knowingly making any false statement, representation, or certification in any record or other document submitted or required to be maintained under a permit, including monitoring reports or reports of compliance or noncompliance.
- O. Applicants seeking authorization under this general permit and permittees that are authorized under this general permit may submit request for a temporary waiver from the electronic reporting requirements at 40 CFR Part 127. The waiver shall not exceed 5 - years at the end of which the permittee shall re-apply, if needed. An approved temporary waiver is not transferable to another owner or operator.
- P. Applicants and permittees that request and are granted temporary waiver may continue to submit NOI, NOT, and NOC forms and annual reports to TCEQ in paper format.

General Permit No. TXG920000 for Concentrated Animal Feeding Operations

APPENDIX I

METHODOLOGY FOR CALCULATING MAXIMUM APPLICATION RATES AND ANNUAL RECALCULATION OF APPLICATION RATES

- A. Identify the Soil Test Phosphorus (P) Level (Extremely Low, Very Low- Low, Medium, High, Very High) on the soil test analysis.

Soil Test P Rating	Soil Test P Levels (ppm*)
Extremely Low	Less than 5
Very Low - Low	5 to less than 20
Medium	20 to less than 50
High	50 to less than 100
Very High	Greater than or equal to 100

\*ppm is equivalent to mg/kg of solids

- B. Update the Applicable Table 1 to Appendix I:
1. Populate the Sub Total column with the point value that corresponds to the Site Characteristic for each.
  2. Calculate the Total Index Points
  3. Select the P Runoff Potential from the total sum of the Index Points of the Site Characteristics using the Phosphorus Index Classification Table.
- C. Determine which of the tables (TABLE 2A or TABLE 2B) of Table 2 to Appendix I on the following page is appropriate to use. Each table describes the criteria for its use.
- D. Determine which application rate column is appropriate using the following criteria:
1. Use the Maximum TMDL Annual P Rate if this LMU is located in a segment with an approved TMDL and TMDL Implementation Plan (TMDL I-Plan).
  2. Use Maximum Annual P Application if this LMU is not located in a segment with an approved TMDL and TMDL I-Plan, and you wish to apply annually.
  3. Use Maximum Biennial Application Rate if this LMU is not located in a segment with an approved TMDL and TMDL I-Plan, and you wish to apply biennially.
- E. Determine the Maximum Application Rate using the table identified in Step C, the column identified in Step D, and the P Runoff Potential identified in Step B.3.
- F. Using one of the approved crops and yield goals approved for each LMU, determine the maximum application rate (in Lbs/Ac) for that crop and yield goal and the Maximum Application Rate identified in Step E from the S-Crops Table, site-specific historic yield data, or other sources as approved by the Executive Director.
1. Example 1: If the Maximum Application Rate in Step 5 is “1.5 Times Annual Crop P Requirement,” find the number identified on the S-Crops Table under the column “Crop P<sub>2</sub>O<sub>5</sub> requirement” for your crop/yield goal, then multiply that number by 1.5 to determine your maximum application rate (in Lbs/Ac P<sub>2</sub>O<sub>5</sub>).
  2. Example 2: If the Maximum Application Rate in Step 5 is “0.5 Times Annual Crop P Removal,” find the number identified on the S-Crops Table under the column “Crop P<sub>2</sub>O<sub>5</sub> Removal Rate” for your crop/yield goal, then multiply that number by 0.5 to determine your maximum application rate (in Lbs/Ac P<sub>2</sub>O<sub>5</sub>).

General Permit No. TXG920000 for Concentrated Animal Feeding Operations

TABLE 1 TO APPENDIX I: PHOSPHORUS INDEX WORKSHEET FOR **EAST TEXAS** FROM NRCS PRACTICE STANDARD 590

Client Name: _____		Field(s): _____			Date: _____	
Planner: _____		Location: _____			Crop: _____	
Impaired Watershed (Y or N): _____		Runoff Curve No.: _____			% Slope: _____	
Site Characteristic (Weighting Factor)	[Weighting Factor Times the Column Factor]					Sub Total
	0	1	2	4	8	
Soil Test P Rating (1.00)	N/A	Very Low - Low	Moderate	High	Very High	
	[0]	[1.0]	[2.0]	[4.0]	[8.0]	
Fertilizer Phosphorus (P <sub>2</sub> O <sub>5</sub> ) Application Rate (0.75)	None Applied	1- 40 lbs/ac P <sub>2</sub> O <sub>5</sub>	41-90 lbs/ac P <sub>2</sub> O <sub>5</sub>	91-150 lbs/ac P <sub>2</sub> O <sub>5</sub>	>150 lbs/ac P <sub>2</sub> O <sub>5</sub>	
	[0]	[0.75]	[1.5]	[3.0]	[6.0]	
Organic Phosphorus (P <sub>2</sub> O <sub>5</sub> ) Application Rate (0.75)	None Applied	1-40 lbs/ac P <sub>2</sub> O <sub>5</sub>	41-90 lbs/ac P <sub>2</sub> O <sub>5</sub>	91-150 lbs/ac P <sub>2</sub> O <sub>5</sub>	>150 lbs/ac P <sub>2</sub> O <sub>5</sub>	
	[0]	[0.75]	[1.5]	[3.0]	[6.0]	
Phosphorus Fertilizer Application Method and Timing (0.50)	None Applied	Placed deeper than 2 in. or broadcast and incorporated within 48 hours	Surface applied 12/1 - 2/15	Surface applied 2/16 - 4/15 or 6/6 - 11/30	Surface applied 4/16 - 6/15	
	[0]	[0.50]	[1.0]	[2.0]	[4.0]	
*Organic Phosphorus Source Application Method and Timing (0.50)	None Applied	Placed deeper than 2 in. or broadcast and incorporated within 48 hours	Surface applied 12/1 - 2/15	Surface applied 2/16 - 4/15 or 6/6 - 11/30	Surface applied 4/16 - 6/15	
	[0]	[0.50]	[1.0]	[2.0]	[4.0]	
Proximity of nearest field edge to named stream or lake (1.25)	> 2000 feet	1000 - 1999 feet	500 - 999 feet	100 - 499 feet	< 100 feet	
	[0]	[1.25]	[2.5]	[5.0]	[10.0]	
Runoff Class (Runoff Class Table 3) (1.00)	Negligible	Low	Moderate	High	Very High	
	[0]	[1.0]	[2.0]	[4.0]	[8.0]	
Soil Erosion (All Sources) (1.50)	Very Low <1 t/ac	Low 1-3 t/ac	Medium 3-5 t/ac	High 5-10 t/ac	Very High >10 t/ac	
	[0]	[1.5]	[3.0]	[6.0]	[12.0]	
Total Index Points:						

**Note**

\*If using effluent with less than 2% solids (applied through a center pivot), the Organic Phosphorus Source Application and Timing, would be considered equivalent to “Placed deeper than 2 inches or broadcast and incorporated with 48 hours”. If using effluent with 2% or more solids, not followed up with clear irrigation water, or not diluted to less than 2% solids, the Organic Phosphorus Source Application and Timing, would be considered as any other non-incorporated surface application.

General Permit No. TXG920000 for Concentrated Animal Feeding Operations

Phosphorus Index Classification - East Texas

Index Points	P Runoff Potential	Non-Impaired Critical P Level (ppm)	Impaired Critical P Level (ppm)
< 12	Very Low - Low	500	300
12 - 22.75	Medium	400	250
23 - 32	High	300	200
> 32	Very High	200	200



General Permit No. TXG920000 for Concentrated Animal Feeding Operations

TABLE 1 TO APPENDIX I: PHOSPHORUS INDEX WORKSHEET FOR WEST TEXAS FROM NRCS PRACTICE STANDARD 590

Client Name: _____		Field(s): _____			Date: _____	
Planner: _____		Location: _____			Crop: _____	
Impaired Watershed (Y or N): _____		Runoff Curve No.: _____			% Slope: _____	
Site Characteristic (Weighting Factor)	[Weighting Factor Times the Column Factor]					Sub Total
	0	1	2	4	8	
Soil Test P Rating (1.00)	N/A	Very Low - Low	Moderate	High	Very High	
	[0]	[1.0]	[2.0]	[4.0]	[8.0]	
Fertilizer Phosphorus (P <sub>2</sub> O <sub>5</sub> ) Application Rate (0.75)	None Applied	1-40 lbs/ac P <sub>2</sub> O <sub>5</sub>	41-90 lbs/ac P <sub>2</sub> O <sub>5</sub>	91-150 lbs/ac P <sub>2</sub> O <sub>5</sub>	>150 lbs/ac P <sub>2</sub> O <sub>5</sub>	
	[0]	[0.75]	[1.5]	[3.0]	[6.0]	
Organic Phosphorus (P <sub>2</sub> O <sub>5</sub> ) Application Rate (0.75)	None Applied	1-40 lbs/ac P <sub>2</sub> O <sub>5</sub>	41-90 lbs/ac P <sub>2</sub> O <sub>5</sub>	91-150 lbs/ac P <sub>2</sub> O <sub>5</sub>	>150 lbs/ac P <sub>2</sub> O <sub>5</sub>	
	[0]	[0.75]	[1.5]	[3.0]	[6.0]	
Phosphorus Fertilizer Application Method and Timing (0.50)	None Applied	Placed deeper than 2 in. or broadcast and incorporated within 48 hours	Incorporated immediately before planting	Incorporated >4 months before planting, or surface applied <4 months before planting	Surface applied >4 months before planting	
	[0]	[0.50]	[1.0]	[2.0]	[4.0]	
*Organic Phosphorus Source Application Method and Timing (0.50)	None Applied	Placed deeper than 2 in. or broadcast and incorporated within 48 hours	Incorporated immediately before planting	Incorporated >4 months before planting, or surface applied <4 months before planting	Surface applied >4 months before planting	
	[0]	[0.50]	[1.0]	[2.0]	[4.0]	
Proximity of nearest field edge to named stream or lake (1.25)	> 2000 feet	1000 - 1999 feet	500 - 999 feet	100 - 499 feet	< 100 feet	
	[0]	[1.25]	[2.5]	[5.0]	[10.0]	
Runoff Class (Runoff Class Table 3) (1.00)	Negligible	Low	Moderate	High	Very High	
	[0]	[1.0]	[2.0]	[4.0]	[8.0]	
Soil Erosion (All Sources) (1.50)	Very Low <1 t/ac	Low 1-3 t/ac	Medium 3-5 t/ac	High 5-10 t/ac	Very High >10 t/ac	
	[0]	[1.5]	[3.0]	[6.0]	[12.0]	
Total Index Points:						

Note

\*If using effluent with less than 2% solids (applied through a center pivot), the Organic Phosphorus Source Application and Timing, would be considered equivalent to "Placed deeper than 2 inches or broadcast and incorporated with 48 hours". If using effluent with 2% or more solids, not followed up with clear irrigation water, or not diluted to less than 2% solids, the Organic Phosphorus Source Application and Timing, would be considered as any other non-incorporated surface application.

General Permit No. TXG920000 for Concentrated Animal Feeding Operations

Phosphorus Index Classification - West Texas

Index Points	P Runoff Potential	Non-Impaired Critical P Level (ppm)	Impaired Critical P Level (ppm)
< 15	Very Low - Low	500	300
15 - 24.75	Medium	400	250
25 - 35	High	300	200
> 35	Very High	200	200

General Permit No. TXG920000 for Concentrated Animal Feeding Operations

TABLE 2 TO APPENDIX I: APPLICATION RATES FROM NRCS PRACTICE STANDARD 590 - Table 2A

Commercial fertilizers must be applied in accordance with SWFTL\* recommendations. Application of all organic soil amendments must not exceed the values in Table 2A or 2B below.

TABLE 2A: A Nutrient Management Plan (NMP)<sup>1</sup> is required where any organic soil amendments are applied where Soil Test P Level is less than 200 ppm statewide or, less than 350 ppm in arid areas<sup>2</sup> with distance to a named stream greater than one mile.

P - Index Rating	Maximum TMDL Annual Application Rate	Maximum Annual P Application Rate	Maximum Biennial Application Rate
Very Low, Low	Annual Crop Nitrogen (N) Requirement	1.0 Times Annual Crop N Requirement	2.0 Times Annual Crop N Requirement
Medium	2.0 Times Annual Crop P Requirement <sup>3</sup>	2.0 Times Annual Crop P Requirement <sup>3</sup>	2.0 Times Annual Crop N Requirement
High	1.5 Times Annual Crop P Requirement <sup>3</sup>	1.5 Times Annual Crop P Requirement <sup>3</sup>	Double the Maximum Annual P Application Not to Exceed 2.0 Times the Annual Crop N Requirement
Very High	1.0 Times Annual Crop P Requirement <sup>3</sup>	1.0 Times Annual Crop P Requirement <sup>3</sup>	Double the Maximum Annual P Application Not to Exceed 2.0 Times the Annual Crop N Requirement

Footnotes

<sup>1</sup> NMP and NUP designations are consistent with 30 TAC §321.40.

<sup>2</sup> All counties must use the 200 ppm P level limit to determine whether to use Table 2A or Table 2B. However, in counties receiving less than 25 inches of annual rainfall, the 350 ppm P level limit applies if the field application area is greater than 1 mile from a named stream or lake. See map in current Texas Agronomy Technical Note 15, Phosphorus Assessment Tool for Texas, for county rainfall designations.

<sup>3</sup> Not to exceed the annual nitrogen requirement rate.

SWFTL\* - Texas A&M AgriLife Extension Soil, Water and Forage Testing Laboratory.

General Permit No. TXG920000 for Concentrated Animal Feeding Operations

TABLE 2 TO APPENDIX I: APPLICATION RATES FROM NRCS PRACTICE STANDARD 590 - Table 2B

TABLE 2B: A Nutrient Utilization Plan (NUP)<sup>1</sup> is required where Soil Test P Level is: equal to or greater than 200 ppm in non-arid areas<sup>2</sup>, or equal to or greater than 350 ppm in arid areas<sup>2</sup> with distance to a named stream greater than one mile and erosion control is adequate to keep erosion at the soil loss tolerance (T) or less, or equal to or greater than 200 ppm in arid areas<sup>2</sup> with distance to a named stream less than one mile.

P - Index Rating	Maximum TMDL Annual P Application Rate	Maximum Annual P Application Rate	Maximum Biennial Application Rate
Very Low, Low	1.0 Times Annual Crop P Removal <sup>4</sup>	Annual Crop N Removal	2.0 Times Crop N Removal
Medium	1.0 Times Annual Crop P Removal <sup>4</sup>	1.5 Times Annual Crop P Removal <sup>4</sup>	Double the Maximum Annual P Application Not to Exceed 2.0 Times the Annual Crop N Removal
High	1.0 Times Annual Crop P Removal <sup>4</sup>	1.0 Times Annual Crop P Removal <sup>4</sup>	Double the Maximum Annual P Application Not to Exceed 2.0 Times the Annual Crop N Removal
Very High	0.5 Times Annual Crop P Removal <sup>4</sup>	0.5 Times Annual Crop P Removal <sup>4</sup>	Double the Maximum Annual P Application Not to Exceed 2.0 Times the Annual Crop N Removal

Footnotes

<sup>1</sup> NMP and NUP designations are consistent with 30 TAC §321.40.

<sup>2</sup> All counties must use the 200 ppm P level limit to determine whether to use Table 2A or Table 2B. However, in counties receiving less than 25 inches of annual rainfall, the 350 ppm P level limit applies if the field application area is greater than 1 mile from a named stream or lake. See map in current Texas Agronomy Technical Note 15, Phosphorus Assessment Tool for Texas, for county rainfall designations.

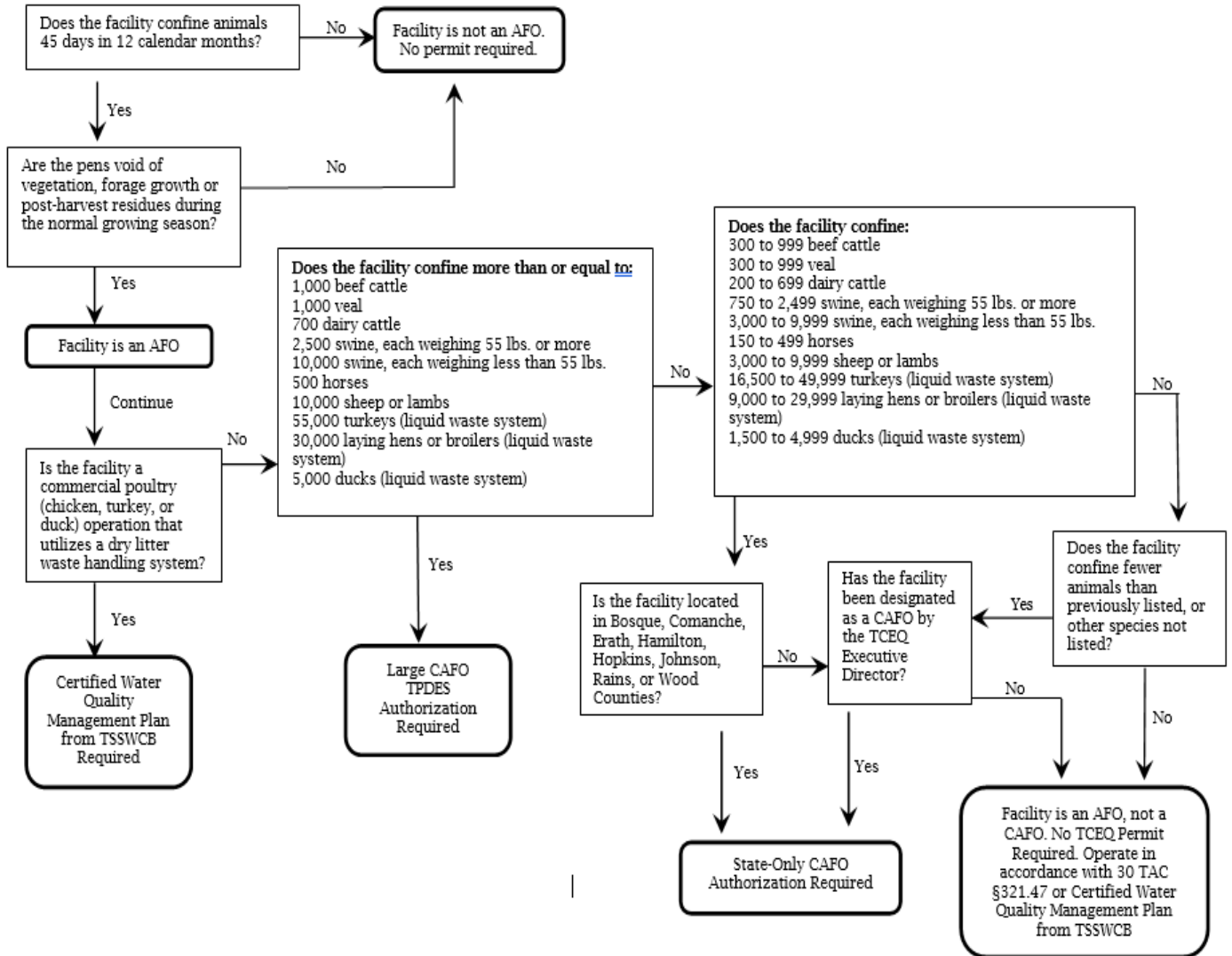
<sup>3</sup> Not to exceed the annual nitrogen requirement rate.

<sup>4</sup> Not to exceed the annual nitrogen removal rate.

# General Permit No. TXG920000 for Concentrated Animal Feeding Operations

## APPENDIX II

AFO/CAFO Permit Flowchart



# **Fact Sheet and Executive Director's Final Decision General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

Issuing Office: Office of Water  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711

Prepared by: Land Application Team  
Water Quality Assessment Section  
Water Quality Division  
(512) 239-4671

Date: July 2019

Permit Action: Amendment and Renewal of General Permit No. TXG920000 for  
Concentrated Animal Feeding Operations

## **I. Summary**

The Texas Commission on Environmental Quality (TCEQ) has renewed General Permit No. TXG920000, which authorizes manure, sludge, and wastewater discharge into or adjacent to water in the state only during chronic or catastrophic rainfall or catastrophic conditions by concentrated animal feeding operations (CAFOs). The general permit (GP) provides coverage for both Texas Pollutant Discharge Elimination System (TPDES) and State-only CAFOs. TPDES CAFOs are CAFO facilities that meet the head count for a Large CAFO by species, as defined in the GP. State-only CAFOs are CAFO facilities that meet the headcount for a Medium CAFO by species, as defined in the GP, and are located in Bosque, Comanche, Erath, Hamilton, Hopkins, Johnson, Rains, or Wood counties. State only CAFOs may also include animal feeding operations that are designated by the Executive Director (ED) as a CAFO because they are a significant contributor of pollutants into water in the state. The GP specifies which facilities may be authorized under this general permit, and which facilities must be authorized by an individual permit.

The amendments to the GP are for clarity, and do not modify the existing requirements or add new requirements.

Authorization under this GP complies with the TPDES requirements in accordance with the Memorandum of Agreement between the U.S. Environmental Protection Agency and TCEQ dated September 14, 1998, for the delegation of the National Pollutant Discharge Elimination System program.

TCEQ published notice of the draft CAFO GP to solicit public comment in the Amarillo Globe-News, Dallas Morning News, Lubbock Avalanche Journal and the Texas Register on February 22, 2019, and in the Stephenville Empire Tribune and Sulphur Springs News - Telegram on February 23, 2019. TCEQ conducted a public meeting on March 25, 2019 to take oral and written testimonies. The public comment period ended on March 25, 2019. TCEQ also took public comment via electronic-comment.

Timely public comments were received from Brad Tomlinson, Andy Riffe, submitted on his behalf by Erich Birch with Birch, Becker & Moorman, LLP, and Ben Weinheimer, on behalf of the Texas Association of Dairymen, the Texas Cattle Feeders Association, the

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

Texas Farm Bureau, the Texas Pork Producers Association and the Texas Poultry Federation and Affiliates. The public comments were addressed in the Commissioners Response to Public Comments.

**II. Executive Director's Recommendation**

The ED has made a final decision that this GP meets all statutory and regulatory requirements. The permit has an expiration date of July 20, 2024.

**III. Permit Applicability and Coverage**

**A. Discharges Eligible for Authorization**

The general permit provides authorization for facilities defined or designated as CAFOs to discharge manure, sludge, and wastewater into or adjacent to surface water in the state. Discharges to surface water in the state may occur from a CAFO designed (25-year frequency 24-hour duration or no discharge for new source swine, veal, or poultry), constructed, and properly operated and maintained under the provisions of this general permit. In addition, the general permit provides requirements for the retention and beneficial land application of manure, sludge, and wastewater generated by a CAFO.

**B. Limitations on Coverage**

1. Discharges from the following CAFOs are not eligible for coverage under this general permit and must be authorized under an individual permit:
  - (a) Except for an existing CAFO which was authorized by the Commission prior to January 10, 1997, any CAFO located within one mile of Coastal Natural Resource Areas as defined by Texas Natural Resources Code §33.203.
  - (b) Any dairy CAFO located in a major sole-source impairment zone, as defined in the general permit.
  - (c) Any CAFO where any part of the production area of the CAFO is located or proposed to be located within the protection zone of a sole-source surface drinking water supply. This paragraph does not apply to dry litter poultry operations.
  - (d) Any CAFO where any part of a production area or land management unit (LMU) is located in a watershed of a segment listed on the current TCEQ's EPA approved Clean Water Act Section 303(d) list of impaired waters where a Total Maximum Daily Load (TMDL) Implementation Plan (I-Plan) has been adopted by the Commission that establishes additional water quality protection measures for CAFOs in addition to those required by the CAFO general permit.
  - (e) Any CAFO that has a site or customer classification that is categorized as "unsatisfactory performer" under 30 TAC §60.3 (relating to Use of Compliance History).
  - (f) Any CAFO required by the ED to obtain and operate under an individual permit.
2. Discharges are not eligible for authorization under this general permit where they are prohibited by:

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

- (a) 30 TAC Chapter 311 (relating to Watershed Protection);
- (b) 30 TAC Chapter 213 (relating to the Edwards Aquifer); or
- (c) any other applicable rules or laws.

**C. Denial of Authorization**

The ED may deny an application for authorization under this general permit, and may require that the applicant apply for an individual permit, if the ED determines that the discharge will not meet water quality standards. The ED may deny an (NOI) or revoke authorization under this general permit if the applicant submits a false affidavit relating to public notice or public meeting. Additionally, the ED may cancel, revoke, or suspend authorization to discharge under this general permit based on a finding of historical and significant noncompliance. An applicant who owns or operates a facility classified as an “unsatisfactory performer” is entitled to a hearing before the Commission prior to having its coverage denied or suspended, in accordance with Texas Water Code § 26.040(h). Denial of authorization to discharge under this general permit or suspension of a permittee’s authorization under this general permit shall be done according to commission rules in 30 TAC §205.4 (relating to Authorizations and Notices of Intent).

**IV. Permit Conditions and Effluent Limitations**

**A. Discharge Restrictions**

No discharge of manure, sludge, or wastewater from a CAFO into or adjacent to surface water in the State is allowed, except when chronic or catastrophic rainfall causes an overflow from a RCS that is properly designed (25-year frequency 24-hour duration; or no discharge for new source swine, veal or poultry), constructed, operated, and maintained. Any swine, veal, or poultry CAFO subject to the new source performance standards in 40 CFR §412.46 must have a RCS designed and constructed so that no discharge occurs. Any other CAFOs must have a RCS designed and constructed to meet or exceed the capacity required to contain the runoff and direct precipitation from the 25-year, 24-hour rainfall event.

Manure, sludge, and wastewater generated by a CAFO must be retained and used in an appropriate and beneficial manner as provided in this general permit and TCEQ rules. This general permit incorporates the effluent limitation guidelines from EPA's rules. See 40 CFR, Part 412.

**B. Effluent Limitations**

**1. Nutrient Management Plan Review and Terms.**

- (a) Permittees must develop and implement a site-specific nutrient management plan (NMP) developed by a certified nutrient management specialist, based on United States Department of Agriculture/Natural Resource Conservation Service (NRCS) Practice Standard 590 Code. The NMP must identify and describe the practices that will be implemented to assure compliance with the effluent limitations in the general permit. The elements of a NMP as listed in 40 CFR §122.42(e)(1) have been incorporated into this permit, and each of the required elements are to be implemented upon issuance of this permit. Large CAFOs are required to submit the NMP and the NOI to be



**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

- authorized under the general permit. Any changes to the NOI, including NOI for a Significant expansion, substantial and non-substantial changes are also required to be accompanied by an updated NMP for review and approval.
- (b) Upon receipt, the ED will review the NMP to identify site-specific permit terms, which must be incorporated as terms and conditions of the permit. The NOI and NMP will be publicly noticed in accordance with the general permit. The Terms of the NMP must include the following:
- (1) Authorized animal type and, or head count;
  - (2) Land management units (LMUs) and application acreage for each LMU;
  - (3) Crops (including alternative crops) identified in the NMP with their yield goals for each LMU;
  - (4) The maximum application rates for Nitrogen (N) and phosphorus (P) for each crop in each LMU;
  - (5) The methodology (including formulas, sources of data, protocols for making determination, etc.), and the actual data that will be used to account for:
    - i. results of soil tests required by Parts III.A.13(c) and (d);
    - ii. credits for all nitrogen in the field that will be plant-available;
    - iii. amount of nitrogen and phosphorus in the manure and wastewater to be applied;
    - iv. consideration of multi-year phosphorus application (for any field where nutrients are applied at a rate based on the crop phosphorus requirement, the methodology must account for single-year nutrient applications that supply more than the crop's annual phosphorus requirement);
    - v. all other additions of plant available nitrogen and phosphorus to the field (i.e., from sources other than manure or wastewater or credits for residual nitrogen);
    - vi. timing and method of land application;
    - vii. volatilization of nitrogen and mineralization of organic nitrogen;
    - viii. nitrogen and phosphorus recommendations from the S Crops Table as contained in the Texas NRCS 590 Software Tool, site-specific historic CAFO yield data or other sources as approved by the ED for each crop identified for each field, including any alternative crops identified; and
    - ix. outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field.
  - (6) Any other factors necessary to determine the amounts of nitrogen and phosphorus to be applied in accordance with Appendix I of the general permit.
- (c) Substantial Change to the Terms of the NMP. The following changes to the terms of the NMP of a large CAFO facility are substantial:
- (1) Changing animal type or increasing authorized head count that increases the manure production at the CAFO by less than 50% of the

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

maximum operating capacity stated in the initial authorization for the facility under TXG920000. If the proposed headcount change will increase the manure production at the CAFO by more than 50%, above the maximum operating capacity stated in the initial authorization, this will be a significant expansion.

- (2) Adding land management units or increasing application acreage.
  - (3) Using a crop or yield goal to determine maximum application rates for manure or wastewater not included in the CAFOs authorization.
- (d) Non-substantial Change to the Terms of the NMP. These changes to the terms of the NMP of a large CAFO are non-substantial:

Non-substantial changes include but are not limited to, a: reduction in the number of permitted animals, a reduction in manure production, decrease in LMU acreage, removal of a LMU, or removal of crop(s) and or yield goal(s) from the alternate crop list previously approved for the CAFO; or changes to the site-specific LMU information on Table 1 of Appendix I - Phosphorus Index Worksheet of this general permit; changes to the maximum application rates, Lbs/Ac of nitrogen or phosphorus as P<sub>2</sub>O<sub>5</sub> to be land applied; or changes in the phosphorus index rating.

For the addition of LMUs, if the land application area to be added to the NMP was previously covered by the terms of a NMP incorporated into an existing TPDES permit in accordance with the requirements of this GP, and the CAFO owner or operator is transferring the LMU(s), such addition would be a non-substantial change.

- (e) NMP Content. The General Permit (GP) requires the NMP to address the following requirements:
- (1) Ensure adequate storage of manure, and wastewater, including procedures to ensure proper operation and maintenance of the storage facilities as described in Part III.A.6 through Part III.A.11 of the GP.
  - (2) Ensure proper management of mortalities (*i.e.*, dead animals) to ensure that they are not disposed of in a liquid manure, storm water, or wastewater storage or treatment system that is not specifically designed to treat animal mortalities consistent with Part III.A.11(c) of the GP.
  - (3) Ensure that stormwater runoff is diverted, as appropriate, from the production area consistent with Part III.A.6(c)(2) of the GP.
  - (4) Prevent direct contact of confined animals with water in the state as described in Part III.B.2 of the GP.
  - (5) Ensure that chemicals and other contaminants handled on-site are not disposed of in any manure, wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals or contaminants consistent with Part III.A.16(a) of the GP.
  - (6) Identify appropriate site-specific conservation practices to be implemented, including buffers or equivalent practices, to control

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

runoff of pollutants to water in the state and to minimize the runoff of nitrogen and phosphorus as described in Part III.A.12(f) of the GP.

- (7) Identify protocols for appropriate testing of manure, wastewater, and soil as described in Part III.A.13 of the GP.
  - (8) 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 or wastewater in accordance with the requirements in Part III.A.12(a) to (e) of the GP.
  - (9) Identify specific records that will be maintained to document the implementation and management of the NMP content consistent with Part IV.A of the GP.
  - (10) Application rates may be expressed in NMPs consistent with the Narrative Rate Approach as described in Appendix I of the GP. The approach expresses the field-specific rate of application as a narrative rate prescribing how to calculate the amount in tons or gallons of manure and wastewater allowed to be land applied.
- (f) Changes to the NMP
- (1) When changes are made to the CAFO's NMP previously submitted to the ED, the permittee must provide the ED with a NOC form containing the terms of the most current version of the revised NMP and identify changes from the previous version, except for annual recalculations of application rates for manure and wastewater, which are not required to be submitted to the ED.
  - (2) When the changes to a NMP are submitted, the ED will review the changes to ensure that they meet the requirements of this permit. If the ED determines that the changes to the NMP necessitate revision to the terms of the NMP incorporated into the authorization issued to the CAFO, the ED will determine whether such changes are substantial or non-substantial.
  - (3) If the ED determines that the changes to the terms of the NMP are non-substantial, the ED will include the revised terms of the 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.  
  
After permit issuance, the ED will notify the public of the revised terms of the NMP by posting for 2 weeks on the TCEQ internet site at: <https://www.tceq.texas.gov/permitting/wastewater/cafo/cafo-nonsubstantial-changes>.
  - (4) If the ED determines that the changes to the terms of the NMP are substantial, the ED will make the proposed changes and the information submitted by the permittee available for public review, and comment by posting the information on the TCEQ internet site at <http://www14.tceq.texas.gov/epic/eCID/>. The posting will provide the

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

opportunity for a public meeting on the revisions to the terms of the NMP.

- (5) The public comment period begins on the first date the notice is posted and ends 30 days later unless a public meeting is held. The public may submit comments to the TCEQ Office of Chief Clerk during the comment period detailing how the NMP for the CAFO fails to meet the technical requirements or conditions of the GP.
  - (6) The ED will hold a public meeting if it is determined there is significant public interest. The ED will post a notice of the public meeting on the TCEQ internet site at: <http://www14.tceq.texas.gov/epic/eCID/>. The notice of a public meeting will be posted at least 30 days before the meeting and will be held in the county where the facility is located. TCEQ staff will facilitate the meeting and provide a sign in sheet for attendees to register their names and addresses. The public meeting held under this general permit is not an evidentiary proceeding. If a public meeting is held, the comment period will end at the conclusion of the public meeting.
  - (7) The ED, after considering public comment(s), shall incorporate the revised terms of the NMP into the permit. Once the revised terms of the NMP have been incorporated into the permit, the ED will include the revised terms of the NMP into the permit record and notify the permittee and the public of the revised terms and conditions of the permit.
2. Numeric Effluent Limitations are established for duck CAFOs. No discharge from a duck CAFO per 1000 ducks shall exceed a daily maximum limit of 3.66 pounds or a monthly average of 2.0 pounds of five-day biochemical oxygen demand and shall not exceed a fecal coliform count of 400 per 100 ml most probable number at any time.
  3. 40 CFR Part 122, which is adopted by reference in 30 TAC §305.541, specifies that any requirements, in addition to or more stringent than promulgated effluent limitation guidelines, must be applied when they are necessary to achieve state water quality standards. Water quality based effluent limitations must be established when TCEQ determines there is a reasonable potential to cause or to contribute to an in-stream exceedance of the allowable ambient concentration of a state numeric criterion. The TCEQ must also consider for CAFO discharges:
    - (a) existing controls on point and non-point sources of pollution;
    - (b) variability of the pollutant in the effluent; and
    - (c) dilution of the effluent in the receiving water.

In this general permit, considerations (a) and (b) above are addressed, because continuous discharges are prohibited and effluent discharges are authorized only during a chronic or catastrophic rainfall event from a facility that is properly designed, constructed, operated, and maintained to contain all process wastewater resulting from the operation of the CAFO plus all runoff from a 25-year, 24-hour storm event for the facility and for the location of the CAFO or no discharge for new source swine, veal or poultry. This permit includes a requirement to identify additional water levels in RCSs to alert operators when normal storage volumes

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

are exceeded that will allow them to manage wastewater levels that meet the requirements of this permit. The effluent pollutant levels are variable and are typically not discharged from the RCSs. Additionally, during these chronic or catastrophic climatic events, water bodies receiving a contribution of CAFO wastewater will be significantly diluted by other rainfall runoff.

Consideration (a) necessitates the imposition of controls on CAFO discharges that will result in the numeric criteria of the water quality standards being met, thus ensuring that applicable uses of water in the state are attained. The principal pollutants of concern include organic matter causing biochemical oxygen demand, the discharge of ammonia-nitrogen, phosphorus, and fecal coliform bacteria.

EPA periodically adopts nationally applicable guidelines identifying the "best practicable control technology" (BPT), "best conventional pollutant control technology" (BCT), and "best available technology economically achievable" (BAT) standards that apply to specific industrial categories and subcategories. However, when such guidelines are published, Clean Water Act (CWA), §402(a)(1) requires that appropriate BCT and BAT effluent limitations be included in permitting actions on the basis of the permitting authority's best professional judgment.

Numeric effluent limitations, other than for duck CAFOs, are neither practicable nor economically achievable because the nature of existing technology does not make numeric effluent limitations feasible. EPA has not promulgated numeric effluent guidelines that would allow regular discharges of CAFO process wastewater or process-generated wastewater, other than for duck CAFOs.

Technology-based effluent limitations are considered in the proposed general permit. They are based on BCT and BAT standards that generally represent the best performing existing technology in an industrial category or subcategory. BAT and BCT effluent limitations may never be less stringent than corresponding effluent limitations based on BPT, a standard applicable to similar discharges before March 31, 1989 under CWA § 301(b)(1)(A). The general permit addresses these potential pollutant impacts through requirements including numerous narrative (non-numeric) BMPs on CAFO wastewater and non-point sources of pollutant discharges associated with CAFOs. Setting specific water quality-based effluent limitations in this permit is not feasible. (See 40 CFR §122.44 (k)(3)(4)). The provisions in the general permit that will result in compliance with non-numeric effluent limitations and protect applicable water quality standards are as follows:

- (a) A licensed Texas Professional Engineer or a licensed Texas Professional Geoscientist must conduct a site evaluation, and certify the absence or presence of any natural or artificial recharge features on the CAFO. If recharge features are present, protective measures must be developed and certified by a licensed Texas Professional Engineer or a licensed Texas Professional Geoscientist to be protective these recharge features.
- (b) RCSs at a CAFO must have a constructed or installed liner certified by a licensed Texas Professional Engineer or have naturally occurring in situ material certified by a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist to have hydraulic conductivity and

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

thickness equivalent to a constructed or installed liner. In lieu of a liner, the permittee may have documentation showing there is no hydrologic connection with groundwater and documentation showing that there will be no significant leakage from the RCS or that any leakage from the RCS will not migrate to water in the state. The lack of hydrologic connection documentation must be certified by a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist.

- (c) Each RCS shall be designed for the authorized number of animals and include the storage for the design rainfall event (no discharge for new source swine, veal or poultry or 25-year, 24-hour), process generated wastewater, one year of sludge accumulation, and treatment volume (if required). Design criteria to meet BAT and BCT must be supplemented with an analysis of how wastewater can be sufficiently stored. Additionally, that documentation must be supplemented with a water balance analysis that demonstrates irrigation and consumption of the wastewater will not create runoff or tailwater.
- (d) New source swine, veal, or poultry CAFOs must have a RCS designed and constructed such that no discharge occurs in accordance with the following:
  - (1) An evaluation of the adequacy of the designed RCS using the most recent version of the Soil Plant Air Water (SPAW) Hydrology Tool or another tool approved by the ED. The evaluation must include all inputs to SPAW including, but not limited to, daily precipitation, temperature, and evaporation data for the previous 100 years, user-specified soil profiles representative of the LMUs, planned crop rotations consistent with the NMP, and the final modeled result of no discharges from the designed RCS. For those CAFOs where 100 years of local weather data is not available, a simulation with a confidence interval analysis conducted over a period of 100 years may be used.
  - (2) Provisions for upset/bypass apply to a new source subject to this provision. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, operating logs, or other relevant evidence that:
    - i. An upset occurred and that the permittee can identify the cause(s) of the upset; and
    - ii. The permitted facility was at the time being properly operated in accordance with this general permit.
- (e) For all new construction or structural modification of a RCS, a permittee must maintain two vertical feet of freeboard between the top of the embankment and the required storage capacity to protect from overtopping the structure. The two feet of freeboard must be constructed of materials equivalent to the construction materials used in the construction of the RCS.
- (f) Measuring devices are required for rainfall and RCS wastewater levels. Records must be maintained showing the required measurements.
- (g) Discharges of wastewater from irrigation areas are prohibited. However, precipitation-related runoff from application areas is allowed by the permit, when consistent with a NMP.

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

- (h) Manure or sludge stored for more than 30 days must be stored within the drainage area of a RCS or stored in a manner (e.g storage shed, bermed area, tarp covered area, etc.) that otherwise prevents contaminated stormwater runoff from the storage area. Storage for more than 30 days is prohibited in the 100-year floodplain.
- (i) Temporary storage of manure or sludge shall not exceed 30 days and is allowed only in LMUs or a RCS drainage area. Temporary storage of manure and sludge in the 100-year flood plain, near water courses or near recharge features may be allowed if protected by berms or other structures to prevent inundation or damage that may occur during a 100-year flood event.
- (j) The drainage area shall be designed and maintained to minimize entry of uncontaminated stormwater runoff into RCSs. Stormwater runoff shall be diverted from contact with feedlots and holding pens, and manure or process wastewater storage systems. In cases where it is not feasible to divert stormwater runoff from the production area, the retention structures shall include adequate storage capacity for the additional stormwater runoff.
- (k) Discharge of manure, sludge, or wastewater is prohibited from a LMU and shall not cause or contribute to a violation of surface water quality standards, contaminate groundwater, or create a nuisance condition.
- (l) Any land application of manure, sludge, or wastewater shall not exceed the planned crop requirements. Land application rates of manure, sludge and/or wastewaters shall be based on the total nutrient concentration on a dry weight basis.

Where a specific chemical pollutant does not have water quality criteria and that pollutant is present in CAFO effluent at a concentration that has the reasonable potential to cause, or contributes to, an exceedance above a narrative criterion in the state water quality standards, TCEQ must establish effluent limits.

Nutrient pollutants of concern have narrative criteria and are present in CAFO wastewater. As described above, numeric effluent limitations are not feasible, at this time. Nutrient pollutants are addressed through imposition of a NMP and BMPs. The permittee of a large CAFO is required to develop and implement a NMP in accordance with the Natural Resources Conservation Service Practice Standard Code 590 by this general permit. The provisions in the general permit that should result in compliance with narrative criteria and protection of attainable water quality are as follows:

- (a) Land application of manure, sludge, and wastewater must ensure the beneficial use of nutrients by the cover crop, based upon the agronomic rate. Land application rates shall be based on the total nutrient concentration on a dry weight basis.
- (b) A permittee shall not land apply any manure, sludge, or wastewater to the LMU except in accordance with a NMP approved by TCEQ when results of the annual soil analysis for extractable phosphorus indicate a level greater than 200 ppm of extractable phosphorus in Zone 1 for a particular LMU or a level greater than 350 ppm of extractable phosphorus in Zone 1 for an LMU where the average annual rainfall is 25 inches or less and erosion control is

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

adequate to keep erosion at the soil loss tolerance (T) or less and the closest edge of the field is more than one mile from a named stream.

- (c) Irrigation practices shall be managed to minimize ponding or puddling of wastewater on-site, prevent tailwater discharges to waters in the state and prevent the occurrence of nuisance conditions.
- (d) Vegetative buffer strips shall be maintained in accordance with Natural Resources Conservation Service Practice Standard Code 393. The minimum buffer shall be no less than 100 feet of vegetation maintained between all manure, sludge, and wastewater application areas and all surface water in the state. A buffer is not required for wastewater irrigation when applied by low-pressure, low-profile center pivot irrigation systems in areas of the state where the annual average rainfall is less than 25 inches per year. This alternative conservation practice meets the requirements of 40 CFR §412.4(c)(5)(ii) by implementation of an alternative conservation practice (e.g. a low-pressure, low-profile center pivot irrigation system) and field specific conditions. Land application of manure, sludge, and wastewater into surface water in the state is an unauthorized discharge and is prohibited.

Research in 1996 (Sharpley *et al*, 1996) demonstrated that a concentration of about 200mg/kg phosphorus in surface soil (about 0-5 cm depth) is the critical level where the concentration of phosphorus in runoff becomes environmentally significant. Based on the Natural Resource Conservation Service's (NRCS) Phosphorus Index as contained in the code 590 - Nutrient Management section of NRCS's Field Office Technical Guide, the critical level of concentration may be increased due to lower average annual rainfall and distance to surface water. TCEQ has established a critical soil phosphorus concentration of 200/350 ppm at which manure, sludge or wastewater cannot be applied unless it is in accordance with a detailed NUP or NMP approved by TCEQ. All counties must use the 200 ppm P level limit if manure, sludge or wastewater are applied where Soil Test P Level is less than 200 ppm. The 350 ppm P level limit applies in counties receiving less than 25 inches of annual rainfall, and where the LMU is greater than 1 mile from a named stream or lake.

**C. General Requirements**

- 1. Any new operation required to obtain authorization under this general permit may not commence construction or operation of any control facilities or LMUs without first receiving authorization.
- 2. The permittee shall take all steps necessary to prevent any adverse effect to human health or safety, or the environment. The permittee shall immediately cease discharging upon becoming aware that a discharge may endanger human health or safety, or the environment and shall provide notification to TCEQ.
- 3. The permittee shall provide the following noncompliance notifications:
  - (a) Any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the appropriate Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the appropriate Regional



**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

Office and the TCEQ Enforcement Division within five business days of becoming aware of the noncompliance.

- (b) Discharges shall be reported by the permittee in writing to the appropriate Regional Office and the TCEQ Enforcement Division within 5 business days.
- (c) For any effluent noncompliance other than that specified in paragraphs (a) and (b) above, the permittee shall notify TCEQ of the noncompliance in writing.

**D. Requirements for Beneficial Use of Manure, Sludge and Wastewater**

The permit contains requirements related to the collection, handling, storage and beneficial use of manure, sludge, and wastewater, which were established based on TCEQ rules, EPA guidance, NRCS technical guidance documents found in the Field Office Technical Guide and the Animal Waste Management Field Handbook, recommendations from the TCEQ's Water Quality Assessment Team, and best professional judgment. The land application requirements related to beneficial use of manure, sludge, and wastewater are protective of ground and surface water when performed in accordance with this permit. When phosphorus is greater than 200/350 ppm, manure, sludge, or wastewater cannot be applied unless it is in accordance with a detailed NUP or NMP approved by TCEQ.

**E. Protection of Impaired Waters**

The permit contains additional requirements or prohibition of coverage under the GP for CAFOs located in an impaired segment listed on the current EPA approved Clean Water Act (CWA) 303(d) list of impaired waters. The following CAFOs are not eligible for coverage under this GP:

1. A dairy CAFO located in a major sole source impairment zone.
2. Any CAFO where any part of the production area or LMU is located in a CWA §303(d) listed segment where a TMDL implementation plan has been adopted by the Commission that establishes additional water quality protection measures for CAFOs that are not required by this general permit.
3. CAFOs located in a segment impaired for bacteria, nutrients, and/or pathogens must adhere to the following additional requirements when authorized under the GP:
  - (a) Land application must be consistent with a NMP certified in accordance with NRCS Practice Standard Code 590 using the phosphorus index rating for impaired waters.
  - (b) The permittee shall install and maintain one of the following between the land application area and the main stem of the impaired segment:
    - (i) a 200-foot vegetative buffer; or
    - (ii) a 100-foot vegetative buffer and a filter strip or vegetative barrier, according to NRCS Practice Standard Codes 393 or 601.

**F. Public Participation**

For a new and significant expansion applications, the applicant must submit the NOI, a site-specific NMP, and a complete technical application to the Executive Director (ED)

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

for review. Upon determining that the application is technically complete, the ED will develop a technical summary that identifies the name and minimum size of each RCS, (acre-feet), LMU name and acreage, the crops to be planted in each land management units (LMUs) or any other uses such as pasture or fallow LMUs; the realistic yield goal for each crop or use identified for each LMU; and the nitrogen and phosphorus recommendations from the NRCS Standards Code 590 for each crop or use identified for each LMU; and a list of alternative crops and yield goals for the facility.

The applicant must publish a notice in the newspaper of general circulation in the county in which the facility is or will be located that provides an opportunity for the public to submit comments on the NOI, NMP and ED's technical summary. In addition, the notice will inform the public that they may request a public meeting. A copy of the notice of intent, NMP, the ED's technical summary, and the concentrated animal feeding operation (CAFO) general permit will be available for viewing and copying at the public viewing location identified in the notice.

For a substantial change application, the applicant must submit the notice of change (NOC), the updated NMP, changes from the previous version of the terms of the NMP except for the annual recalculations of application rates of manure and wastewater, and the applicable Attachments to the NOC to the ED for review. Upon determining that the application is technically complete, the ED will develop a technical summary that identifies the name and minimum size of each RCS, (acre-feet), Site-Specific Information from the updated NMP including, land management unit (LMU) name and acreage, maximum application rate of nitrogen and phosphorus for each LMU; and a list of alternative crops and yield goals.

The TCEQ will post the notice on the TCEQ website that provides an opportunity for the public to submit comments on the NOC, updated NMP and ED's technical summary. In addition, the notice will inform the public that they may request a public meeting. A copy of the NOC, the revised terms of the NMP, and the ED's technical summary will be available for viewing and copying at the TCEQ's Office of the Chief Clerk, 12100 Park 35 Circle Austin, Texas 78753, and the TCEQ Regional Office where the CAFO is located. The ED will hold a public meeting if there is significant public interest.

**V. Summary of Changes to the General Permit**

Page 1 of the GP: issuance, effective and expirations dates were changed.

The issuance date changed from July 09, 2009 to July 10, 2014; the effective date changed from July 20, 2014 to July 20, 2019; and the expiration date changed from July 20, 2019 to July 20, 2024.

A list of abbreviations and their meanings has been added before the definitions.

**A. Part I - Definitions**

Five new definitions were added to this Section of the permit, and two definitions were revised:

1. *Deteriorated well - a well that, because of its condition, will cause or is likely to cause pollution of any water in the state, including groundwater.*

For clarity and to be consistent with 16 TAC Chapter 76 definitions, "deteriorated well" was used in place of "unusable wells" and the rule

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

citation was revised for standards for capping and plugging wells in Part III.4(c)(4).

**Current language:** All abandoned and unusable wells shall be plugged according to 16 TAC Chapter 76.

**Revised language:** *All abandoned and deteriorated wells shall be plugged according to 16 TAC Chapter 76.104.*

2. *Owner - The person who owns a facility or part of a facility.*
3. *Person - An individual, corporation, organization, government or governmental subdivision or agency, business trust, partnership, association, or any other legal entity.*
4. *Professional Engineer (PE) - An engineer who maintains a current license through the Texas Board of Professional Engineers in accordance with the requirements for professional practice.*
5. The definition of retention control structure was revised to be consistent with the CAFO rules at 30 TAC §321.32(51), to remove the “and/or” reference, and to exclude bermed manure and sludge storage areas.

**Current language:** Retention control structure (RCS) - Any basin, pond, pit, tank, conveyance, or lagoon used to store and/or treat manure, wastewater, and sludge. The term RCS does not include conveyance systems such as irrigation piping or ditches that are designed and maintained to convey but not store any manure or wastewater, nor does it include cooling ponds located in the production area.

**Revised language:** Retention control structure (RCS)--Any basin, pond, pit, tank, conveyance, or lagoon used to *hold, store, or* treat manure, wastewater, and sludge. The term RCS does not include conveyance systems such as irrigation piping or ditches that are designed and maintained to convey but not store any manure, or wastewater, nor does it include cooling ponds located in the production area, *or bermed manure and sludge storage areas.*

6. *Wellhead protection structure - This is a structure used to protect wellhead from irrigation wastewater. It may include a hard-walled, possibly framed, structure with a roof or otherwise covered. Structure should be secured to the ground or wellhead to withstand the elements (e.g., wind or storms) and grazing livestock. Structure must be designed to avoid wastewater from contacting the wellhead. Structure may be constructed of plywood, corrugated or sheet metal, fiber glass, plastics, synthetics, or other materials, which are structurally capable for the intended purpose. Structure may be removable or hinged to allow servicing of well or well components.*
7. The definition for manure was revised (italicized) as follows:  
Manure - Feces and/or urine excreted by livestock and poultry. Manure includes litter, bedding, compost, feed, and other raw materials commingled with feces and/or urine. *Manure may exist in solid, semi-solid, or slurry form.*

**B. Part II – Permit Applicability and Coverage**

1. For clarity purposes, the following italicized texts were added to Part II.C.3.(c):

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

The public comment period begins on the first date the notice is posted and ends 30 days later unless a public meeting is held. The public may submit comments to the TCEQ Office of Chief Clerk during the comment period detailing how the *revised terms of the NMP* for the CAFO fail to meet the technical requirements or conditions of this general permit.

2. Part II.C.9.(a)(2)(ii) was revised to add examples (italicized texts) of what constitutes non-substantial changes to the terms of the NMP:

Non-substantial changes include but are not limited to: *reduction in the number of permitted animals, or a reduction in manure production, decrease in LMU acreage or removal of a LMU, or removal of crop(s) and or yield goal(s);*

3. Part II.F.3 removed “and terms of the NMP” since this was a recent requirement during the 2014 GP renewal.

**C. Part III.A. - Pollution Prevention Plan (PPP) Requirements**

1. Part III.A.4(c)(2) that relates to Well protection requirements was revised for clarity purposes. The Section addresses the requirements for wells drilled before July 2004 and any replacement wells; and wells drilled after July 2004.

**Current language:** The permittee may continue the operation and use of any existing holding pens, LMUs and RCSs located within the required well buffer zones provided they are protected in accordance with the recharge feature evaluation and certification required in Part III.A.3. For new wells drilled after July 20, 2004, documentation supporting variances of the buffer zones that were previously authorized must be kept on-site and made available to TCEQ personnel upon request.

**Revised language:** The permittee may continue the operation and use of any existing holding pens, LMUs and RCSs located within the required well buffer zones provided they are protected in accordance with the recharge feature evaluation and certification required in Part III.A.3.

- (i) *Wells drilled before July 20, 2004, and any replacement wells, must be protected in accordance with the recharge feature certification requirements in this general permit. The recharge feature certification serves as documentation authorizing variances to the buffer zone requirements for those wells. The recharge feature certification must be kept on site and made available to TCEQ personnel upon request. It is not necessary to submit a request for a variance to the buffer zone requirements for these wells to the TCEQ.*
  - (ii) *For wells drilled on or after July 20, 2004, requests for variances to the buffer zone requirements must be submitted to the TCEQ for review and approval. The buffer variance approval letter must be kept on site and made available to TCEQ personnel upon request.*
2. Part III.A.4(a) and (b) were revised to delete “surface” implying that permittees must identify all potential pollutant sources that may contribute pollutants to both surface and groundwater in the state.

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

- Part III.A.4(a): Potential pollutant sources include any activity or material of sufficient quantity that may reasonably be expected to add pollutants to surface water in the state from the facility.
- Part III.A.4(b): The permittee shall identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion. If these areas have the potential to contribute pollutants to surface water in the state, the permittee shall identify in the PPP measures used to limit erosion and pollutant runoff.
3. Part III.A.4(c)(6) was revised for clarity:
- Current language:** Irrigation of wastewater directly over a well head will require a structure protective of the wellhead that will prevent contact from irrigated wastewater.
- Revised language:** Irrigation of wastewater directly over a well head will require a *wellhead protection* structure protective of the wellhead that will prevent contact from irrigated wastewater.
4. Part III.A.5(a)(3)(iii) was reworded for clarity.
- Current language:** a chronic/catastrophic rainfall discharge from a LMU that occurs because the permittee takes measures to de-water the RCS in accordance with Part III.A.10(b), relating to imminent overflow.
- Revised language:** a discharge from a LMU that occurs because the permittee takes measures to de-water the RCS in accordance with Part III.A.10(b), relating to imminent overflow *due to chronic/catastrophic rainfall*.
5. Part III.A.6(g) that relates to liner requirements was revised for clarity.
- Current language:** For all new construction and for all structural modifications of existing RCSs, each RCS must meet the requirements for lack of hydrologic connection or have a liner consistent with paragraph (2), (3), or (4) below.
- Revised language:** For all new construction and for all structural modifications of existing RCS(s), each RCS must demonstrate the lack of hydrologic connection or a liner *is required that complies* with paragraph (2), (3), or (4) below.
6. Part III.A.6(g)(3)(ii) was revised to be consistent with the CAFO rules.
- Current language:** Liners shall be designed and constructed to have hydraulic conductivities no greater than  $1 \times 10^{-7}$  centimeters per second (cm/sec), with a thickness of 18 inches or its equivalency in other materials, and not to exceed a specific discharge through the liner of  $1.1 \times 10^{-6}$  cm/sec calculated using Darcy's Law with a water level at spillway depth.
- Revised language:** Liners shall be designed and constructed to have hydraulic conductivities no greater than  $1 \times 10^{-7}$  centimeters per second (cm/sec), with a thickness of 18 inches *or greater* or its equivalency in other materials, and not to exceed a specific discharge through the liner of  $1.1 \times 10^{-6}$  cm/sec calculated using Darcy's Law with a water level at spillway depth.

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

7. Part III.A.10(f)(5) was revised to clarify that the repaired areas of a liner must be recertified.

**Current language:** For re-certification of an earthen liner following mechanical or structural damage, a minimum of one sample shall be collected and analyzed to document that the liner meets the requirements of the liner certification for that RCS prior to the damage.

**Revised language:** For re-certification of an earthen liner following *the repair of* mechanical or structural damage, a minimum of one sample shall be collected *from the repaired area* and analyzed to document that the liner meets the requirements of the liner certification for that RCS prior to the damage.

8. Part III.A.12 was reworded for clarity:

**Current language:** A permittee authorized as a Large CAFO must develop and implement a NMP, certified by an individual or employee of an entity identified in Part III.A.14(b), in accordance with the Texas NRCS Practice Standard Code 590 upon authorization under this general permit. The NMP shall be updated annually to incorporate the most recent manure, sludge, wastewater, and soil analyses.

**Revised language:** A permittee authorized as a Large CAFO must implement the NMP developed in accordance with the Texas NRCS Practice Standard Code 590 *which has been approved by the ED*. The NMP shall be updated annually to incorporate the most recent manure, sludge, wastewater, and soil analyses. *The NMP shall be certified by an individual or employee of an entity identified in Part III.A.14(b) of this general permit.*

9. Part III.A.12(b)(6) was revised to clarify that nutrient application must be in accordance with the GP.

**Current language:** Any other factors necessary to determine the amounts of nitrogen and phosphorus to be applied in accordance with the Narrative Rate Approach.

**Revised language:** Any other factors necessary to determine the amounts of nitrogen and phosphorus to be applied in accordance with *this general permit*.

10. The following sentences were added to Part III.A.14 for clarity:

*CAFOs that are authorized as State only are required to comply with this section of the GP. If the soil test for a LMU shows a phosphorus (P) level of 200 ppm or greater.*

11. Part III.A.16(b)(1)(i) was revised for clarity:

**Current language:** a playa is used as a RCS, as required by Texas Water Code §26.048, or

**Revised language:** a playa is used as a RCS, as *allowed* by Texas Water Code §26.048, or

12. Part III.A.16(b)(4) was revised to clarify the referenced groundwater monitoring plan:

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

**Current language:** A groundwater monitoring plan shall be developed and certified by a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist.

**Revised language:** The groundwater monitoring plan *required by Part III.A.16(b)(1)(ii)* shall be developed and certified by a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist.

**D. Part IV.B. Reporting and Recordkeeping**

1. The dates for the reporting periods in Part IV.B.1 were deleted because they are no longer applicable as most of the CAFOs would have established their reporting period during the term of the last CAFO GP.

**Current language:** Annual Reporting Requirement. Large CAFOs must submit an annual report with all information required in this section to the appropriate TCEQ regional office and the TCEQ's Office of Compliance and Enforcement, Enforcement Division (MC 224, P.O. Box 13087, Austin, Texas 78711) by March 31 of each year for the 12-month reporting period identified by the permittee. If the CAFO was covered under the previous CAFO general permit and selects a reporting period different from January 1 to December 31, the first annual report due on March 31, 2015 shall include the required information from January 1, 2014 to the beginning of the selected reporting cycle (for example, September 1 to August 31 selected as the reporting period, March 31, 2015 annual report would include the information from January 1, 2014 to August 31, 2014). Subsequent annual reports would be for 12 months (for example, year 2, from September 1, 2014 to August 31, 2015 due March 31, 2016). State-only CAFOs must submit items (h), (i) and (o) of this section by same deadline. The report shall be on forms prescribed by the Executive Director to include, but not limited to:

**Revised language:** Annual Reporting Requirement. Large CAFOs must submit an annual report with all information required in this section to the appropriate TCEQ regional office and the TCEQ's Office of Compliance and Enforcement, Enforcement Division (MC 224, P.O. Box 13087, Austin, Texas 78711) by March 31 of each year for the 12-month reporting period identified by the permittee. State-only CAFOs must submit items (h), (i) and (o) of this section by the same deadline. The report shall be on forms prescribed by the Executive Director to include, but not limited to:

2. Part IV.B.3 was revised to exclude the cleaning of conveyances to RCSs from notifications to the TCEQ Region.

**Current language:** The permittee shall provide written notice to the appropriate TCEQ regional office as soon as the RCS cleaning is scheduled, but not less than ten business days prior to cleaning. The permittee shall also provide written verification of completion to the regional office within five business days after the cleaning is complete. This paragraph does not apply to cleaning of solid separators or settling basins. Removal of sludge shall be conducted during favorable wind conditions that carry odors away from nearby receptors. Any increase in odors associated with a properly managed cleanout under this subsection will be taken into consideration by

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

the Executive Director when determining compliance with the provisions of this general permit.

**Revised language:** The permittee shall provide written notice to the appropriate TCEQ regional office as soon as the RCS cleaning is scheduled, but not less than ten business days prior to cleaning. The permittee shall also provide written verification of completion to the regional office within five business days after the cleaning is complete. This paragraph does not apply to cleaning of solid separators, settling basins, *or conveyances into the RCS*. Removal of sludge shall be conducted during favorable wind conditions that carry odors away from nearby receptors. Any increase in odors associated with a properly managed cleanout under this subsection will be taken into consideration by the Executive Director when determining compliance with the provisions of this general permit.

Part IV.B.5(f) was added to the GP to address corrective action. The Section states: Corrective actions taken to cease the discharge and to prevent recurrence of the discharge.

**E. Part V. Standard Permit Conditions**

Sections V.O and P were added to the GP to address EPA's electronic-reporting (e-reporting) requirements codified in 40 CFR Part 127. The requirements read as follows:

- O. Applicants seeking authorization under this general permit and permittees that are authorized under this general permit may submit request for a temporary waiver from the electronic reporting requirements at 40 CFR Part 127. The waiver shall not exceed 5 - years at the end of which the permittee shall re-apply, if needed. An approved temporary waiver is not transferable to another owner or operator.
- P. Applicants and permittees that request and are granted temporary waiver may continue to submit NOI, NOT, and NOC forms and annual reports to TCEQ in paper format.

**F. Appendix**

Appendix I. Added notes to Tables 1 and 2 for "Organic phosphorus source application method and timing (0.5)" to be consistent with the NRCS Practice Standard 590.

Appendix II. AFO/CAFO Permitting Flowchart was added to the last page of the permit.

**VI. Addresses**

Questions concerning this general permit should be sent to:

Land Application Team (MC-150)  
Water Quality Assessment Section  
Water Quality Division  
Texas Commission on Environmental Quality  
P. O. Box 13087  
Austin, Texas 78711-3087



**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**  
(512) 239-4671

**Comments on this general permit should be sent to:**

Office of the Chief Clerk (MC-105)  
Texas Commission on Environmental Quality P.O. Box 13087  
Austin, TX 78711-3087

Supplementary information on this Fact Sheet is organized as follows:

- VII. Legal Basis
- VIII. Regulatory Background
- IX. Permit Coverage
- X. Technology-Based Requirements
- XI. Water Quality-Based Requirements
- XII. Monitoring
- XIII. Procedures for Final Decision
- XIV. Administrative Record

**VII. Legal Basis**

Texas Water Code (TWC), §26.121 makes it unlawful to discharge pollutants into or adjacent to surface water in the state, except as authorized by a rule, permit, or order issued by the commission. TWC, §26.027 authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to surface water in the state. TWC, § 26.040 provides the commission with authority to authorize waste discharges by general permit.

On September 14, 1998, the TCEQ received authority from the United States Environmental Protection Agency (EPA) to administer the Texas Pollutant Discharge Elimination System (TPDES). 40 CFR, Parts 122, 412, and 33 United States Code (USC) §§1251, 1311, 1314, 1316, 1317, 1318, 1342, and 1361 include provisions that require NPDES permits to include effluent limitations from authorized discharges to: (1) meet standards reflecting levels of technological capability; (2) comply with EPA approved state water quality standards; and (3) comply with other state requirements adopted under authority retained by states under CWA § 510 and 33 USC §1370.

For certain CAFOs, the EPA standards and effluent limitations as contained in 40 CFR Parts 122 and 412 state that there shall be no discharge of waste or wastewater from animal feeding operations into waters of the United States, except when chronic or catastrophic rainfall or catastrophic condition causes an overflow. For new source swine, veal, and poultry CAFOs, there shall be no discharge of waste or wastewater into waters of the United States.

**VIII. Regulatory Background**

As allowed by TWC, §26.040 – General Permits, TCEQ may issue a general permit to authorize the discharge of waste into or adjacent to water in the state by category of dischargers when there are a large number of similar discharges

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

occurring that contain common characteristics. The discharge and beneficial use of CAFOs manure, sludge, or wastewater occurs in numerous areas across the state, and the character and quality of the manure, sludge, and wastewater from the same species are generally similar. This results in similar types of facilities and waste handling operations for these types of facilities. Because of the similar character of the facilities and waste generated it is appropriate to regulate them under a general permit. Where exceptions exist, such as prohibitions against general permit coverage for dairies in a major sole source impairment zone, the general permit contains restrictions and prohibitions for allowing those facilities to obtain authorization under the CAFO individual permit.

**IX. Permit Coverage**

This general permit covers the discharge of manure, sludge, and wastewater into or adjacent to surface water in the state by CAFO facilities under certain conditions. The permit identifies those facilities that may be authorized under this general permit and those that must be authorized by an individual permit.

- A. Applicants seeking authorization to discharge under the general permit must submit a completed NOI on a form approved by the ED as well as a copy of the site-specific NMP consistent with Part III.A.12 of the GP. The NOI shall include at a minimum the legal name and address of the applicant, the facility name and address, specific description of its location, (including the street address, if applicable, and county), the number and type(s) of animals, the type and size of RCSs, the estimated amount of manure, sludge, and wastewater generated annually and transferred off-site annually, the acreage of LMUs, the crops to be planted in each land management units (LMUs) or any other uses such as pasture or fallow LMUs; the realistic yield goal for each crop or use identified for each LMU; and the nitrogen and phosphorus recommendations from the NRCS Standards Code 590 for each crop or use identified for each field, the maximum application rates for nitrogen and phosphorus and the list of alternative crops and yield goals.
- B. Submission of a NOI, and for Large CAFOs, a NMP certified by a Certified Nutrient Management Specialist is an acknowledgment that the conditions of this GP are applicable to the proposed discharges and that the applicant agrees to comply with the conditions of the GP. For renewals, provisional authorization to discharge under the terms and conditions of this general permit begins 48 hours after a completed NOI is postmarked for delivery to the TCEQ unless otherwise restricted. If the NOI is submitted electronically, provisional authorization to discharge under the terms and conditions of this general permit begins immediately following confirmation of receipt of the NOI by TCEQ.
- C. For a new CAFO, or a CAFO that requests a significant expansion, or a substantial change, authorization under the terms and conditions of this general permit begins when the applicant is issued a written TCEQ authorization. The permitting process for these applications includes a public participation component that allows members of the public to comment on whether or not the CAFO meets the requirements of the general permit, and allows the public an opportunity to request a public meeting. If significant interest exists, the applicant for a new and

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

significant expansion CAFO will be required to hold a public meeting in the county where the facility is proposed to be located or located, and for a substantial change the ED will hold the public meeting in the county where the facility is located. The ED, after considering public comment(s), will approve or deny the NOI or NOC based on whether the NOI or NOC and technical application meet the requirements of the GP. The Commission will notify the applicant and everyone on the mailing list of its final decision on whether to grant or deny the authorization.

- D. Coverage under this GP is not transferable. If the ownership of the regulated entity changes, the present owner must submit a Notice of Termination (NOT) and the new owner must submit a NOI. The NOT and NOI must be submitted no fewer than 10 days before the change in ownership occurs.
- E. A permittee must submit a Notice of Change (NOC) within 14 days when information submitted to the ED must be updated or corrected; or when changes are made to the terms of the NMP previously approved for the CAFO.
- F. A permittee may terminate coverage under this GP by providing a NOT on a form approved by the ED. A NOT must be submitted in the following instances:
  - 1. when a CAFO is not operational within 18 months after authorization, or at the expiration of the requested and granted 18 months extension;
  - 2. when a NOI is submitted by a new permittee when the facility ownership changes;
  - 3. when submitting an individual permit application to replace general permit authorization;
  - 4. when the facility is no longer in use and has been closed, with certification by a licensed Texas Professional Engineer that closure of the facility is completed; or
  - 5. with a statement from the landowner that the facility will be operated as an animal feeding operation not defined or designated as a CAFO.

The authorization will not be terminated until final action is taken on the new NOI or individual permit application, receipt of post-closure documentation, or receipt of landowner statement that the facility will be operated as an animal feeding operation.

- G. Any CAFO that obtains authorization under this GP must be operational within 18 months of the date of the CAFOs authorization or must terminate coverage under this GP by submitting a NOT. Upon written request to the TCEQ Water Quality Division, the ED may grant a one-time extension up to an additional 18 months, to allow the CAFO additional time to become operational. If an extension is granted and the CAFO is not operational at the expiration of the extension period, the CAFO must submit a NOT terminating coverage under this GP. The facility does not have to be operating at the maximum number of animals authorized to be considered operational.

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

**X. Technology-Based Requirements**

The conditions of the general permit were developed to comply with the technology-based standards of 40 CFR Part 412. The permit includes a series of BMPs and performance standards based on NRCS technical standards rather than numeric effluent limitations, to address the collection, storage, treatment, and land application of manure, sludge, or wastewater and to limit pollutants in any discharges.

**XI. Water Quality-Based Requirements**

The permit authorizes the land application of manure, sludge, and wastewater and only allows a discharge to surface water when chronic or catastrophic rainfall or catastrophic conditions result in an RCS overflow. For new source swine veal or poultry, no discharge from the RCS is allowed. No water quality impacts are expected to occur from land application of manure, sludge, or wastewater when applied at agronomic rates. Although the Texas Surface Water Quality standards do apply to the instream effects of CAFO discharges, the TCEQ has not developed routine procedures for setting chemical-specific numeric effluent limitations for stormwater and stormwater related discharges. Instead of numeric water quality-based effluent limitations, this permit establishes minimum control and BMPs to prohibit discharges that occur only during defined chronic or catastrophic rainfall events. Discharges occurring during these conditions are highly intermittent in nature and would be significantly diluted by rainfall runoff.

**XII. Monitoring**

Monitoring requirements were established based on TCEQ rules, and 40 CFR Part 412 which requires monitoring to insure compliance with the permit limits. For any discharges, grab samples must be collected and analyzed for all applicable parameters and reported to TCEQ. Soil samples from LMUs must be taken annually and reported to the TCEQ.

**XIII. Procedures for Final Decision**

The Memorandum of Agreement between the EPA and TCEQ provides that EPA has 90 days to comment, object, or make recommendations to the draft general permit before notice of the draft permit is published in the *Texas Register*. According to 30 TAC Chapter 205, when the draft general permit is proposed, notice must be published, at a minimum, in the Texas Register and at least one newspaper of statewide or regional circulation. The commission may also publish notice in additional newspapers of statewide or regional circulation at its discretion. Mailed notice must also be provided to the following:

- A. the county judge of the county or counties where the discharges under the general permit could be located;
- B. if applicable, state and federal agencies identified in 40 CFR §124.10(c);
- C. persons on a relevant mailing list maintained under 30 TAC §39.407, relating to Mailing Lists; and
- D. any other person the ED or chief clerk may elect to include.

**Fact Sheet and Executive Director's Final Decision**  
**General Permit No. TXG920000 for Concentrated Animal Feeding Operations**

After notice of the GP is published in the Texas Register and the newspaper(s), the public will have a 30-day period to provide public comment on the proposed GP.

Any person, agency, or association may make a request for a public meeting on the proposed GP before the end of the public comment period. A public meeting will be granted when the ED determines that there is significant degree of public interest in the proposed GP. A public meeting is intended for the taking of public comment and is not a contested case hearing under the Administrative Procedure Act. The ED may also call and conduct a public meeting on the proposed GP.

If the ED sets a public meeting, the Commission will give notice of the date, time, and place of the meeting, as required by Commission rules. The ED shall prepare a response to all significant public comments on the proposed GP raised during the public comment period, including those received at any CAFO GP public meeting. The ED shall make the draft response to comment available to the public by filing with the TCEQ Office of the Chief Clerk no later than ten (10) days prior to the TCEQ commission agenda date when the commissioners consider whether to issue the GP.

**XIV. Administrative Record**

The following section is a list of the fact sheet citations to applicable statutory or regulatory provisions and appropriate supporting references.

A. 40 Code of Federal Regulation (CFR) Citations

Part 122; Part 123; Part 127 and Part 412.

B. TCEQ Rules

30 TAC Chapters 39, 205, 305, 307, 309, 319, 331, and 335.

CAFO Rules in 30 TAC §321 Subchapter B.

Texas Water Code §26.0286.

Texas 2014 Clean Water Act Section 303(d) List, TCEQ, June 3, 2015; approved by EPA on November 19, 2015.

C. Miscellaneous

EPA's CAFO National Pollutant Discharge Elimination System (NPDES) rules adopted effective April 18, 2003.

EPA's CAFO NPDES rules adopted and effective February 10, 2006.

EPA's CAFO NPDES rules adopted and effective December 22, 2008.

U. S. Department of Agriculture, Natural Resources Conservation Service Field Office Technical Guide (FOTG and web site on-line version eFOTG) and Animal Waste Management Field Handbook.

Texas Natural Resources Conservation Service, Conservation Practice Standard (Nutrient Management) Code 590, December 2012.

Andrew Sharpley, T.C. Daniel, J.T. Sims, and D.H. Pote, 1996. Determining environmentally sound soil phosphorus levels. *Journal of Soil and Water Conservation* 1996 51(2):160-166.

---

## COMMISSIONER'S RESPONSE TO PUBLIC COMMENT

---

The Texas Commission on Environmental Quality (commission or TCEQ) adopts this Response to Public Comment (Response) on Concentrated Animal Feeding Operations (CAFOs) general permit TXG920000 (CAFO GP). The CAFO GP authorizes the discharge of manure, sludge, and wastewater under chronic or catastrophic rainfall conditions or events. As required by Texas Water Code (TWC), §26.040(d) and Title 30 Texas Administrative Code (30 TAC) Section (§)205.3(c), before a general permit is issued, the Executive Director (ED) must prepare a response to all timely, relevant and material, or significant comments. The response must be made available to the public and filed with the Office of the Chief Clerk at least ten days before the Commission considers the approval of the general permit. This response addresses all timely received public comments, whether or not withdrawn. Timely public comments were received from Brad Tomlinson, Andy Riffe, submitted on his behalf by Erich Birch with Birch, Becker & Moorman, LLP, and Ben Weinheimer, on behalf of the Texas Association of Dairymen, the Texas Cattle Feeders Association, the Texas Farm Bureau, the Texas Pork Producers Association and the Texas Poultry Federation and Affiliates (CAFO Industry Groups).

If you need more information about this permit or the wastewater permitting process, please call the TCEQ Office of Public Assistance at 1-800-687-4040. Additionally, general information about the TCEQ can be found at our website at [www.tceq.texas.gov](http://www.tceq.texas.gov).

### **BACKGROUND**

This is a renewal with amendment of a Texas Pollutant Discharge Elimination System / State General Permit authorizing Concentrated Animal Feeding Operations in the state of Texas. The draft permit will replace the current permit that will expire on July 20, 2019.

The CAFO GP contains requirements related to the collection, handling, storage and beneficial use of manure, wastewater, and sludge. These requirements were established based on state and federal rules, the NRCS Field Operations Technical Guidance, and the Animal Waste Management Field Handbook.

Land application of manure, sludge, and wastewater must be in accordance with a Nutrient Management Plan (NMP) that was developed by a certified nutrient management specialist, based on United States Department of Agriculture/Natural Resource Conservation Service (NRCS) Practice Standard 590, which provides the permittee the necessary information to properly manage the amount, form, placement and timing for the application of nutrients to the Land Management Units (LMUs). Vegetative buffer strips shall be maintained in accordance with NRCS Practice Standard Code 393. The minimum buffer shall be no less than 100 feet of vegetation to be maintained between land application areas and all surface water in the state.

Discharge of wastewater from irrigation is prohibited, except a discharge resulting from irrigation events associated with imminent overflow conditions. Precipitation-related runoff from land application areas is allowed by the permit, when land application practices are consistent with a nutrient management plan or nutrient utilization plan.

The CAFO GP contains additional requirements or prohibition of coverage under the general permit for CAFOs located in an impaired segment listed on the current EPA-approved 303(d) list of impaired waters. The following CAFOs are not eligible for coverage under the CAFO GP:

- (1) a dairy CAFO located in a major sole source impairment zone; and
- (2) any CAFO where any part of the production area or LMU is located in a 303(d) listed segment where a Total Maximum Daily Load (TMDL) implementation plan has been adopted by the Commission that establishes additional water quality protection measures for CAFOs which are not required by the CAFO GP.

CAFOs that are located in a segment impaired for bacteria, nutrients, and/or pathogens, must adhere to the following requirements:

- (1) land application must be consistent with a NMP certified in accordance with NRCS Practice Standard Code 590 using the phosphorus index rating for impaired waters.
- (2) The permittee must install and maintain one of the following between the land application area and the main stem of the impaired segment: a 200-foot vegetative buffer; or a 100-foot vegetative buffer and a filter strip or vegetative barrier, according to NRCS Practice Standard Codes 393 or 601.

### **PROCEDURAL BACKGROUND**

TCEQ published notice of the draft CAFO GP to solicit public comment in the *Amarillo Globe-News*, *Dallas Morning News*, *Lubbock Avalanche Journal* and the *Texas Register* on February 22, 2019, and in the *Stephenville Empire Tribune* and *Sulphur Springs News - Telegram* on February 23, 2019. TCEQ conducted a public meeting on March 25, 2019 to take oral and written testimonies. The public comment period ended on March 25, 2019. TCEQ also took public comment via electronic-comment.

### **COMMENTS and RESPONSES**

#### **COMMENT 1**

Mr. Tomlinson commented that the TCEQ should review applications for CAFOs cumulatively or based on other dairies in the area affecting the environment and other issues, water issues affecting the neighbors (draw down of wells), road safety issues, among others. According to him, the dairy owners buy land in another name, so they can dump sludge and wastes off site which are not regulated. This allows runoff and over-application of nutrients, thereby causing water quality problems.

Additionally, Mr. Tomlinson requests that the state and the TCEQ have more power to be able to regulate off-site land application areas that are not included as a land management unit under the CAFO authorization.

#### **RESPONSE 1**

The concerns raised by Mr. Tomlinson are currently addressed by the CAFO GP provisions described below. Therefore, no changes to the CAFO GP were made in response to Mr. Tomlinson's comments.

According to the CAFO GP, manure, sludge, and wastewater generated by a CAFO must be retained and used in an appropriate and beneficial manner. Discharges to water in the state may occur from a properly designed, constructed, operated and maintained CAFO only during chronic or catastrophic rainfall or catastrophic conditions.

The CAFO GP requires that permittees land apply manure, sludge and wastewater in accordance with a nutrient management plan (NMP), which must be developed by a certified nutrient management specialist based on the United States Department of Agriculture/Natural Resource Conservation Service Nutrient Management Practice

Standard 590. The NMP provides the permittees with the necessary information to properly manage the amount, form, placement, and timing of nutrient application to the LMUs.

In addition, the CAFO GP allows CAFOs to transfer manure, sludge and wastewater off-site for beneficial use. CAFOs must maintain records of such exports and include the information in the annual report that is due to the TCEQ on March 31 of each year for the reporting period. The recipients of transferred manure, sludge or wastewater are responsible for ensuring that they are used beneficially and must implement management practices to prevent or reduce the pollution of water in the state.

Regarding CAFO ownership and loopholes that CAFO owners may use to circumvent the regulation by buying properties under a different name and transferring CAFO manure, sludge and wastewater to the property because it is unregulated, the CAFO GP has mechanisms to prevent these actions by CAFO owners, such as the definition of a Land Management Unit (LMU).

A CAFO LMU is defined as:

“An area of land owned, operated, controlled, rented or leased by a CAFO permittee to which manure, sludge, or wastewater from the CAFO is or may be applied. This includes land associated with a single center pivot system or a tract of land on which similar soil characteristics exist and similar management practices are being used. Land management units include historical waste, application fields. The term "land management unit" does not apply to any lands not owned, operated, controlled, rented or leased by the CAFO permittee for the purpose of off-site land application of manure, sludge, or wastewater wherein the manure, sludge or wastewater is given or sold to others for land application.”

If the land meets any of the criteria above (owned, operated, controlled, rented or leased), then the permittee will be in violation of the CAFO GP if it is not an LMU under the authorization. Such lands cannot be considered “off-site” for the purposes of land application of CAFO manure, sludge or wastewater.

TCEQ does not have the statutory authority to regulate the amount of groundwater that can be pumped from wells. Local and regional groundwater conservation districts may have restrictions on well spacing and pumping. Such restrictions, if they exist locally, are beyond the scope of the CAFO GP. But it should be noted that the CAFO GP does not authorize any invasion of personal rights nor any violation of federal, state, or local laws and regulations.

Regarding the concentration of CAFOs, the TCEQ does not have the statutory authority to regulate zoning and it is beyond the TCEQ’s power to regulate an applicant’s site selection. Land use is controlled by local municipalities.

The CAFO GP is protective of human health and the environment. However, individuals are encouraged to report any concerns about nuisance issues or suspected noncompliance with the terms of any permit or other environmental regulation by calling the TCEQ 24-hour, toll-free Environmental Complaints Hotline at 1-888-777-3186. Additionally, complaints may be filed online at [www.tceq.texas.gov/complaints](http://www.tceq.texas.gov/complaints) or contact the TCEQ Regional Office. TCEQ investigates all complaints received. If the facility is found to be out of compliance with the terms and conditions of its permit, it may be subject to a possible enforcement action. Citizen complaints may also be filed on-line at <https://www.tceq.texas.gov/assets/public/compliance/monops/complaints/complaints.html>



## **COMMENT 2**

Mr. Tomlinson commented that an operator who operates multiple CAFOs and has violations should not be granted another CAFO operating permit without considering the violations because it will be an indication of poor site management. Mr. Tomlinson requests that TCEQ review each permit application on a one-by-one basis considering: the effect on the neighbors, the concentration of CAFOs in the area, effects on the road with the number of trucks and manure / sludge spill on the road, effect on water use, and impact of water use on neighboring wells.

## **RESPONSE 2**

TCEQ acknowledges the significance of the concerns of nearby landowners regarding consideration for neighbors, trucks and manure on the road, water use, and impact of water use on neighboring wells. However, some of the concerns raised by Mr. Tomlinson are currently addressed by the CAFO GP provisions described below or are concerns that the TCEQ does not have the statutory authority to address in the permitting process. Therefore, no changes to the CAFO GP were made in response to Mr. Tomlinson's comments.

The ED reviews applications for consistency with the rules as set forth in 30 TAC 321 subchapter B. In the wastewater permitting process, TCEQ is tasked by the Legislature with protecting the quality of water in the state. The concerns described above by Mr. Tomlinson are not factors in determining whether an Applicant has met all the statutory and regulatory criteria applicable to a wastewater permit. That said, the CAFO GP does not allow the permit holder to maintain a condition of nuisance that could interfere with a landowner's use and enjoyment of his property.

The CAFO GP requires that CAFO facilities develop a pollution prevention plan (PPP) in accordance with good engineering practices and include control measures necessary to limit the discharge of pollutants to water in the state. The PPP is to be amended:

- (1) before any change in the acreage or boundaries of LMUs;
- (2) before any increase in the maximum number of animals;
- (3) after any new construction or modification of control facilities;
- (4) before any change which has a significant effect on the potential for the discharge of pollutants to water in the state;
- (5) if the PPP is not effective in achieving the general objectives of controlling pollutants in discharges from the production area or LMUs; or
- (6) within 90 days following written notification from the Executive Director that the plan does not meet one or more of the minimum requirements of this general permit.

Regarding compliance history, when CAFOs renew their CAFO GP authorization, TCEQ generates a Compliance History Report and any CAFOs that have a compliance rating of "unsatisfactory" will lose coverage under the CAFO GP and be required to apply for an individual permit coverage.

## **COMMENT 3**

Ben Weinheimer, on behalf of the CAFO Industry Groups, commented that the CAFO Industry Groups continue their support and approval of the CAFO GP.

### **RESPONSE 3**

TCEQ acknowledges the supportive comment.

### **COMMENT 4**

Ben Weinheimer, on behalf of the CAFO Industry Groups, commented that the definition of “Wellhead Protection Structure” should be revised by deleting the words “or manure” in two instances within the definition because installation of a Wellhead Protection Structure is only necessary to help prevent direct contact of wastewater with a wellhead. Mr. Weinheimer also stated that in the case of dry manure application, the manure spreading equipment is operated in a manner to maintain the required buffer zone between the wellhead and where the manure is being land applied.

### **RESPONSE 4**

For the purposes of consistency with the Pollution Prevention Plan Requirements, found in Part III.A.4(4)(c)(6) of the CAFO GP, and in response to this comment, the definition for “Wellhead Protection Structure,” found in the CAFO GP, was revised by deleting “or manure.” The revised definition reads as follows:

“A structure used to protect the wellhead from irrigation wastewater. It may include a hard-walled, possibly framed, structure with a roof or otherwise covered. Structure should be secured to the ground or wellhead to withstand the elements (e.g., wind or storms) and grazing livestock. Structure must be designed to avoid wastewater from contacting the wellhead. Structure may be constructed of plywood, corrugated or sheet metal, fiber glass, plastics, synthetics, or other materials, which are structurally capable for the intended purpose. Structure may be removable or hinged to allow servicing of well or well components.”

### **COMMENT 5**

Ben Weinheimer, on behalf of the CAFO Industry Groups, commented that Part III.A.16.(b)(4) of the CAFO GP should be revised to clarify that only ground water monitoring plans required by the Executive Director must be developed and certified by licensed Professional Engineer or licensed Professional Geoscientist. They recommended adding “(ii)” to Part III.A.16(b)(1).

### **RESPONSE 5**

In response to this comment, “(ii)” was added to the referenced section in Part III.A.16(b)(4) of the CAFO GP. The section reads as follows:

“The groundwater monitoring plan required by Part III.A.16(b)(1)(ii) shall be developed and certified by a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist.”

### **COMMENT 6**

Andy Riffe commented that the CAFO GP does not provide adequate protections to water sources, particularly ground water in Texas. Mr. Riffe commented further that CAFOs pose a threat to ground water resources in West Texas, and that the CAFO GP does not include stringent requirements to protect the water quality in the Ogallala Aquifer or include specific provisions to protect the Aquifer. He suggests the Ogallala Aquifer be designated a sole source aquifer.

Mr. Riffe commented that he believes that the CAFO GP is a one size fits all permit and that it should not be applicable to CAFOs that are around the Ogallala Aquifer. Instead, as

Mr. Riffe commented, CAFOs around the Ogallala Aquifer should be required to obtain an individual permit. Mr. Riffe stated that an individual permit requires more detailed, site specific review and more detailed regulatory requirements to protect the water resources.

Mr. Riffe commented further that if an individual permit is not required, then a well-designed and TCEQ approved groundwater monitoring system should be required for any CAFO that is or will be located in the area of the Ogallala Aquifer.

## **RESPONSE 6**

Some of the concerns raised by Mr. Riffe are currently addressed by the CAFO GP provisions described below or are concerns that the TCEQ simply does not have the authority to address in the permitting process. Therefore, no changes to the CAFO GP were made in response to Mr. Riffe's comments.

Designating the Ogallala Aquifer as a Sole Source Aquifer for Drinking Water is outside the scope of the CAFO GP and the authority of TCEQ. The authority to designate aquifers as sole source resides with the U.S. Environmental Protection Agency (EPA). Please visit the following web address for details: <https://www.epa.gov/dwssa/guidance-petitioning-sole-source-aquifer-ssa-designation>.

The CAFO GP is protective of both surface and ground water resources.

Part III.A.3 of the CAFO GP includes the requirements for recharge features.

### **3. Recharge Feature Certification**

- (a) The permittee shall have a recharge feature certification developed in accordance with the Executive Director's guidance, RG-433 "Guidelines for Identifying and Protecting Aquifer Recharge Features." Use of the forms provided in RG-433 is optional. The certification must be signed and sealed by a licensed Texas Professional Engineer, or a licensed Texas Professional Geoscientist, documenting the absence or presence of any natural or artificial recharge features identified on any tracts of land owned, operated, controlled, rented, or leased by the permittee and to be used as a part of a CAFO or LMU.
- (b) If the recharge feature certification identifies the presence of recharge features, the applicant shall have protective measures developed, signed and sealed by a licensed Texas Professional Engineer, or licensed Texas Professional Geoscientist, as appropriate and in conformance with the Texas Engineering Practices Act and the Texas Geoscience Practice Act and the licensing and registration boards under these acts. The protective measures must prevent impacts to an aquifer from any recharge features present. The protective measures must include at least one of the following:
  - (1) measures to protect each located recharge feature, such as impervious cover, berms, buffer zones, or other equivalent protective measures; or
  - (2) a detailed groundwater monitoring plan, in accordance with Part III.A.16(b); or
  - (3) provisions for any other similar method or approach demonstrated by the applicant to be protective of any associated recharge feature and approved by the Executive Director.
- (c) The permittee must implement the protective measures.

In addition, Part III.A.4(c) includes the well protection requirements:

(c) Well Protection Requirements

- (1) The permittee must not locate or operate RCSs, holding pens, or LMUs within the following buffer zones except in accordance with paragraph (2) in this section:
  - (i) public water supply wells - 500 feet;
  - (ii) wells used exclusively for private water supply - 150 feet; or
  - (iii) wells used exclusively for agriculture irrigation - 100 feet.
- (2) The permittee may continue the operation and use of any existing holding pens, LMUs and RCSs located within the required well buffer zones provided they are protected in accordance with the recharge feature evaluation and certification required in Part III.A.3.
  - (i) Wells drilled before July 20, 2004, and any replacement wells, must be protected in accordance with the recharge feature certification requirements in this general permit. The recharge feature certification serves as documentation authorizing variances to the buffer zone requirements for those wells. The recharge feature certification must be kept on site and made available to TCEQ personnel upon request. It is not necessary to submit a request for a variance to the buffer zone requirements for these wells to the TCEQ.
  - (ii) For wells drilled on or after July 20, 2004, requests for variances to the buffer zone requirements must be submitted to the TCEQ for review and approval. The buffer variance approval letter must be kept on site and made available to TCEQ personnel upon request.
- (3) Construction of any new water well must be done in accordance with the requirements of this general permit and 16 TAC Chapter 76, relating to Water Well Drillers and Water Well Pump Installers.
- (4) All abandoned and deteriorated wells shall be plugged according to 16 TAC Chapter 76.104.
- (5) The permittee shall not locate new LMUs within the required well buffer zones unless additional wellhead protective measures are implemented that will prevent pollutants from entering the well and contaminating groundwater. An exception to the full well buffer zone for a private drinking water well or a water well used exclusively for agricultural irrigation may be approved by the Executive Director if a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist provides accurate documentation showing that additional wellhead protective measures will be or have been implemented that will prevent pollutants from entering the well and contaminating the groundwater. Additional protective measures may include a sanitary seal, annular seal, a steel sleeve, or surface slab.
- (6) Irrigation of wastewater directly over a well head will require a wellhead protection structure protective of the wellhead that will prevent contact from irrigated wastewater.

Moreover, the CAFO liner requirements in Part III.A.10(g) are in place to protect groundwater. The permit requirements are as follows:

(g) Liner Requirements

For all new construction and for all structural modifications of existing RCS(s), each RCS must demonstrate the lack of hydrologic connection or a liner is required that complies with paragraph (2), (3), or (4) below.

(1) Lack of Hydrologic Connection

- (i) Documentation must show that there will be no significant leakage from the RCS(s); or that any leakage from the RCS(s) will not migrate to water in the state. The lack of hydrologic connection documentation shall be certified by a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist and must include information on the hydraulic conductivity and thickness of the natural materials underlying and forming the walls of the containment structure up to the wetted perimeter.
- (ii) If it is claimed that no significant leakage would result from the use of in-situ materials, documentation must be provided that leakage will not migrate to waters in the state. The permittee must, at a minimum, include maps showing groundwater flow paths, or that the leakage enters a confined environment. The permittee shall also include a written determination by an NRCS engineer, licensed Texas Professional Engineer, or licensed Texas Professional Geoscientist that a liner is not needed to prevent a significant hydrologic connection between the contained wastewater and water in the state.

(2) RCS Liner using In-situ Material

In-situ material is undisturbed, in-place, native soil material. In-situ materials must at least meet the minimum criteria for hydraulic conductivity and thickness as described in Part III.A.6(g)(3). Samples shall be collected and analyzed in accordance with Part III.A.6(g)(5). The calculated specific discharge through the in-situ material must meet the requirements of Part III.A.6(g)(3). This documentation must be certified by a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist.

(3) Constructed or Installed Earthen Liner

- (i) Constructed or installed liners must be designed by a licensed Texas Professional Engineer. The liner must be constructed in accordance with the design and certified as such by a licensed Texas Professional Engineer. Compaction tests and post construction sampling and analyses, conducted in accordance with Part III.A.6(g)(5), will provide support for the liner certification.
- (ii) Liners shall be designed and constructed to have hydraulic conductivities no greater than  $1 \times 10^{-7}$  centimeters per second (cm/sec), with a thickness of 18 inches or greater or its equivalency in other materials, and not to exceed a specific discharge through the liner of  $1.1 \times 10^{-6}$  cm/sec calculated using Darcy's Law with a water level at spillway depth.

- (iii) Constructed or installed liners must be designed and constructed to meet the soil requirements, lift requirements, and compaction testing requirements as listed in Part III.A.6(f)(1), (2), and (4).

(4) Geosynthetic Liners

Geosynthetic liners that meet the specific discharge standard in Part III.A.6(g)(3) are acceptable if certified by a licensed Texas Professional Engineer. Documentation must be presented to the Executive Director for review and approval before putting into service. Installation of the liner shall be certified by a licensed Texas Professional Engineer that the liner and subgrade were completed according to the manufacturer's recommendations and current standards. Seams shall be completed in accordance with the manufacturer's requirement. When wedge weld seams are used, non-destructive seam testing shall be conducted on the complete length of the wedge weld by standard air pressure testing. The certification must document compliance with all of the following standards: ASTM D 5888 Storage and Handling of Geosynthetic Clay liners, ASTM D 5889 Quality Control of Geosynthetic Clay Liners, and ASTM D 6102 Guide for Installation of Geosynthetic Clay Liners.

(5) Liner Sampling and Analyses of In-Situ Material or Earthen Liners

- (i) The licensed Texas Professional Engineer or licensed Texas Professional Geoscientist shall use best professional practices to ensure that corings or other liner samples will be appropriately plugged with material that also meets liner requirements of this subsection.
- (ii) Samples shall be collected in accordance with ASTM D 1587 or other method approved by the Executive Director. For each RCS, a minimum of two core samples shall be collected from the bottom of the RCS and a minimum of one core sample shall be collected from each sidewall. Additional samples may be necessary based on the best professional judgment of the licensed Professional Engineer. Distribution of the samples shall be representative of liner characteristics, and proportional to the surface area of the sidewalls and floor. Documentation shall be provided identifying the sample locations with respect to the RCS liner.
- (iii) For earthen liners, undisturbed samples shall be analyzed for hydraulic conductivity in accordance with ASTM D 5084, whole pond seepage analysis as described in ASABE Paper Number 034130, Double Ring Infiltrometer (stand pipe), or other method approved by the Executive Director.

(6) Leak Detection System

If notified by the Executive Director that significant potential exists for the adverse impact of water in the state or drinking water from leakage of the RCS, the permittee shall install a leak detection system or monitoring well(s) in accordance with that notice. Documentation of compliance with the notification must be kept with the PPP, as well as copies of all sampling data.

Part III.A.12(c) of the CAFO GP includes the general requirements for land application, and are as follows:

- (c) Land Application Requirements. All permittees must manage LMUs according to the following requirements.
  - (1) Discharge of manure, sludge, or wastewater is prohibited from a LMU and shall not cause or contribute to a violation of surface water quality standards, contaminate groundwater, or create a nuisance condition.
  - (2) Land application shall not occur when the ground is frozen or saturated or during rainfall events unless in accordance with Part III.A.10(b) of this permit.
  - (3) Any land application of manure, sludge, or wastewater shall not exceed the planned crop requirements. Land application rates of manure, sludge or wastewaters shall be based on the total nutrient concentration, on a dry weight basis, where applicable.
  - (4) The land application of manure, sludge, and wastewater at agronomic rates and hydrologic needs shall not be considered surface disposal and is not prohibited.
  - (5) Where manure, sludge, or wastewater is applied in accordance with a site-specific NMP that complies with Part III.A.12(a), precipitation-related runoff from LMUs is authorized as a pollutant discharge if the source is land associated with a CAFO in a major sole-source impairment zone; or an agricultural stormwater discharge for all other sources as defined in 33 U.S.C. §1362 (14).
  - (6) Irrigation practices shall be managed so as to minimize ponding or puddling of wastewater on the site, prevent tailwater discharges to waters in the state, and prevent the occurrence of nuisance conditions.
  - (7) A permittee introducing wastewater or chemicals to water well heads for the purpose of irrigation shall install backflow prevention devices in accordance with requirements contained in 16 TAC Chapter 76 (relating to Water Well Drillers and Water Well Pump Installers) and 30 TAC Chapter 290 (relating to Public Drinking Water), as appropriate.
  - (8) Land application at night shall only be allowed if there is no occupied residence(s) within 0.25 mile from the outer boundary of the actual area receiving manure, sludge, or wastewater application. In areas with an occupied residence within 0.25 mile from the outer boundary of the actual area receiving manure, sludge, or wastewater application, application shall only be allowed from one hour after sunrise until one hour before sunset, unless the current resident owner or lessee of such residences have, agreed in writing to specified nighttime applications.

Regarding individual permits, facilities that meet the requirements of the CAFO GP can obtain coverage under it. However, if any facility meets the limitations on coverage in Part II.B of the CAFO GP, then obtaining permit coverage under an individual permit will be required. The requirements in the CAFO GP are consistent with the CAFO Rules at 30 TAC Chapter 321, subchapter B and 40 Code of Federal Regulation Part 122.23.

Authorizations under the CAFO GP are reviewed in detail, similar to individual permits.

All CAFO GP applications are thoroughly reviewed to ensure protection of groundwater by requiring adequate buffers from wells and recharge features. Wastewater and manure holding facilities and application areas are reviewed to ensure that adequate buffers are maintained from surface waters. The Nutrient Management Plan reviews ensure that nutrients are not applied at a rate higher than can be utilized by crops. The engineering review verifies that the RCSs are designed with adequate capacity to store process generated wastewater and manure, to hold rainfall runoff from the design storm events, and provide for odor control.

As correctly noted by Mr. Riffe, the ED has the authority to require facilities to obtain authorization under an individual permit. However, historical compliance problems, significant site-specific environmental problems, impaired watersheds with an approved TMDL, and complex operations that require permit conditions to be consolidated into one comprehensive permit for the discharge to meet water quality standards, are the applicable criteria for requiring individual permits. Absent the criteria described above, the ED cannot force a facility to obtain authorization under an individual permit.

#### **COMMENT 7**

Andy Riffe raised concerns about nuisance odors, the proliferation of CAFOs in the Panhandle region, and the cumulative effect of the odors from the existing CAFOs and new CAFOs that will be authorized in the area. Mr. Riffe requested significantly greater set-back distances between CAFOs and neighbors.

#### **RESPONSE 7**

The concerns raised by Mr. Riffe that are within the authority of the TCEQ to address in the permitting process are already addressed by the CAFO GP provisions described below. Therefore, no changes to the CAFO GP were made in response to Mr. Riffe's comments.

The CAFO GP requires that potential pollutant sources be identified, and that PPP be developed and implemented for proper operation and maintenance of the facility so as not to create nuisance conditions. The CAFO GP also requires that CAFOs operate in such a manner as to prevent the creation of a nuisance, and defines "nuisance" as:

"Any discharge of air contaminant(s), including but not limited to odors, of sufficient concentration and duration that are or may tend to be injurious to or which adversely affects human health or welfare, animal life, vegetation, or property, or which interferes with the normal use and enjoyment of animal life, vegetation, or property."

Regarding odor, Part II.C.10 of the CAFO GP includes requirements for CAFOs.

Air quality authorization under the Texas Clean Air Act, Texas Health and Safety Code §382.051, is required for all CAFOs, regardless of their size. Depending on its specific characteristics, a CAFO may obtain air quality authorization in one of three ways:

- (a) by meeting the requirements of a permit-by-rule under 30 TAC Chapter 106, Subchapter F (relating to Animal Confinement);
- (b) by obtaining an individual permit under 30 TAC Chapter 116 (relating to Control of Air Pollution by Permits for New Construction or Modification); or
- (c) by meeting the requirements of the air standard permit outlined in 30 TAC Chapter 321.43 (relating to Air Standard Permit Authorization for Concentrated Animal Feeding Operations).



The CAFO GP requires CAFOs to operate according to the requirements of the Air Standard Permit for Animal Feeding Operations (See 30 Texas Administrative Code (TAC) §321.43). CAFOs are required to maintain the following buffer distances:

1. Dry litter poultry facilities

If applying litter to land associated with the poultry houses (on-farm application), the following considerations are to be taken into account:

- (a) Do not apply litter within 100 feet of public roads.
- (b) Do not apply litter within 500 feet of any residence, school, park, place of worship or other facility used by the public.
- (c) Application of litter during morning hours is preferable. Do not apply litter after 5:00 pm.
- (d) Do not apply litter on weekends or federal holidays that occur Monday-Friday if any residence, school, park, place of worship or other facility used by the public is located within 1,500 feet of the nearest edge of the application area.
- (e) Do not apply litter while the wind direction is from any point of application toward a residence, school, park, place of worship or other facility used by the public within 1,500 feet of the nearest edge of the application area.
- (f) Do not apply litter during any rainfall event or if rain is imminent.
- (g) Cover all loads of litter if being transported on public roads.
- (h) Only apply litter at the agronomic rate specified by the Water Quality Management Plan.

2. Liquid manure handling poultry facilities

For facilities that use a liquid manure handling system, they are required to be permitted by TCEQ under either the CAFO general or individual permit.

3. All CAFO facilities are required to maintain the following buffer distances:

Feature	Distance*	Notes
Sinkhole	100 feet	<u>Or</u> 35 feet with a vegetative buffer
Public Drinking Water Supply Well	500 feet	
Private Drinking Water Supply Well	150 feet	
Agriculture Irrigation Well	100 feet	
Water in the State	100 feet	vegetative
Residence, Business, School, Church, Public Park (pre-Aug 19, 1998 facility)	¼ mile**	<u>Or</u> an Odor Control Plan (OCP)
Residence, Business, School, Church, Public Park (post-Aug 19, 1998 facility)	½ mile**	<u>Or</u> ¼ mile and an OCP

\* distance from areas of manure, litter, and wastewater application.

\*\* distance from permanent odor source for Air Authorization.

Regarding the proliferation of CAFOs in the area, the TCEQ rules do not regulate the number of CAFOs in any given location, but rather the waste generated by the animals at each facility, and the management of the waste in a beneficial way that will not create a nuisance condition or cause water quality problems. Instead of numeric water quality-based effluent limitations, the CAFO GP establishes minimum control and management

practices to restrict discharges to occur only during defined chronic or catastrophic rainfall events or catastrophic conditions. Additionally, the TCEQ does not have the statutory authority to regulate zoning and land use.



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**A RESOLUTION** in the matter of a Renewal with Amendments of a Texas Pollutant Discharge Elimination System / State Only General Permit which authorizes manure, sludge, and wastewater discharge into or adjacent to water in the state only during chronic or catastrophic rainfall or catastrophic conditions by concentrated animal feeding operations, General Permit No. TXG920000; TCEQ Docket No. 2019-0156-MIS; Project No. 2018-015-OTH-NR.

**WHEREAS**, under Texas Water Code (TWC), § 26.121, no person may discharge waste or pollutants into or adjacent to any water in the state except as authorized by a rule, permit, or order issued by the Texas Commission on Environmental Quality (TCEQ or Commission);

**WHEREAS**, under TWC, § 26.027, the TCEQ has the authority to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to waters in the state;

**WHEREAS**, under TWC, § 26.040, the TCEQ has the authority to issue a general permit to authorize the discharge of waste into or adjacent to waters in the state;

**WHEREAS**, a renewal with amendments of a Texas Pollutant Discharge Elimination System (TPDES) / State Only general permit which authorizes manure, sludge, and wastewater discharge into or adjacent to water in the state only during chronic or catastrophic rainfall or catastrophic conditions by concentrated animal feeding operations (CAFOs), was drafted and proposed by the Executive Director and is attached as Exhibit A;

**WHEREAS**, the TCEQ received public comments on the general permit, and drafted a Response to Public Comment, which is attached as Exhibit B;

**WHEREAS**, the Commission reviewed in accordance with Texas Natural Resources Code, § 33.205 and 30 TAC § 205.5(f) the changes to the general permit for consistency with the Texas Coastal Management Program (CMP) and found that the general permit is consistent with applicable CMP goals and policies and that the

general permit will not adversely affect any applicable coastal natural resource areas as identified in the CMP;

**WHEREAS**, the Commission determined in accordance with TWC, § 26.040(a)(1) - (4) that the general permit would authorize dischargers who engage in the same or substantially similar types of operations, discharge the same types of waste, are subject to the same requirements regarding effluent limitations or operating conditions, and are subject to the same or similar monitoring requirements;

**WHEREAS**, the Commission finds in accordance with TWC, § 26.040(a)(5) that the general permit would apply to dischargers who are more appropriately regulated under a general permit than under individual permits and that:

(A) the general permit has been drafted to assure that it can be readily enforced and that the Commission can adequately monitor compliance with the terms of the general permit; and

(B) the category of discharges covered by the general permit will not include a discharge of pollutants that will cause significant adverse effects to water quality; and

**THEREFORE**, after consideration of all public comments and the responses to such comments, the Commission, by this resolution, hereby issues the general permit, attached as Exhibit A, as recommended by the Executive Director and as approved by the Commission during its June 26, 2019, public meeting. The Commission, by this resolution, also hereby issues the Executive Director's Response to Comments as approved by the Commission during its June 26, 2019 public meeting as the Commission's Response to Public Comment, attached as Exhibit B.

Furthermore, the Commission directs staff to make any non-substantive changes to the general permit and the Commission's Response to Public Comments to satisfy *Texas Register* format requirements and requests that the general permit and Commission's Response to Public Comments be made available to the public in accordance with the requirements of TWC, § 26.040(d) and 30 TAC § 205.3(e).

It is so **RESOLVED**.

TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY

-----  
Jon Niermann, Chairman

-----  
Date Signed