

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

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

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 what facilities may be authorized under this general permit, and those facilities that 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.

II. Executive Director's Recommendation

The ED has made a preliminary 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:
 - (a) 30 TAC Chapter 311 (relating to Watershed Protection);

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

- (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

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

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 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

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

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 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 the following:
- (1) a reduction in the number of permitted animals;
 - (2) a reduction in manure production, decrease in LMU acreage;
 - (3) removal of a LMU;
 - (4) removal of crop(s) and or yield goal(s) from the alternate crop list previously approved for the CAFO;
 - (5) 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 P₂O₅ to be land applied; and
 - (6) 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

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

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 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

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

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 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

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

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 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.

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

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 thickness equivalent to a constructed or installed liner. In lieu of a liner,

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

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:
 - (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.
- 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.

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

- 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.
- 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

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

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 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 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 general permit for CAFOs located in an impaired segment listed on the current EPA approved Clean Water Act (CWA) 303(d) list of impaired

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

waters. The following CAFOs are not eligible for coverage under this general permit:

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 requirements:
 - (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:
 - (1) a 200-foot vegetative buffer; or
 - (2) 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, significant expansion and substantial change applications, the applicant must submit the NOI or NOC (substantial change), a site-specific NMP, and a complete technical application to the Executive Director (ED) for review. Upon determining that the application is technically complete, the ED will develop a technical summary that identifies the minimum size of each RCS, and the name, size (in acre-feet), LMU name, LMU acreage, proposed crop(s), proposed yield goal(s), and proposed application rate for each LMU.

For a new and significant expansion, the applicant must publish a notice in the newspaper of general circulation in the county in which the facility is 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, the TCEQ will post the notice on the TCEQ website that provides an opportunity for the public to submit comments on the NOC, 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 change, the 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

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

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

A. Part I - Definitions

Four new definitions have been added to this Section of the permit and one definition has been revised:

1. Owner - The person(s) or entity(ies) who owns a CAFO facility or part of a CAFO facility.
2. 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.
3. Texas pollutant discharge elimination system (TPDES) - The state program for issuing, amending, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under Clean Water Act, §§307, 318, 402, and 405; Texas Water Code; and Texas Administrative Code regulations.
4. Semi-permanent and Permanent Well Structures - These are structures such as well houses used to protect wellhead from irrigation wastewater or manure. They may include 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). Structure must prevent damage from livestock, when livestock may be present. Structure must prevent wastewater or manure from contacting the wellhead. Structure may be constructed of plywood, corrugated or sheet metal, fiber glass, etc
5. 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, slurry, or liquid form.*

B. Part II - Permit Applicability and Coverage

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

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

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, a: 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);”

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 (Italicized): “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” clarifying that permittees must identify all potential pollutant sources that may contribute pollutants to water in the state which includes both surface and groundwater.

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

3. Part III.A.4(c)(4) was revised to update the rule citation for standards for capping and plugging wells from 16 TAC Chapter 76 to 16 TAC §76.104.
4. Part III.A.4(c)(6) was revised to read as follows: "Irrigation of wastewater directly over a well head will require a *semi-permanent or permanent* structure protective of the wellhead that will prevent contact from irrigated wastewater." This is to prevent the use of unstable structures that can be blown away by wind thereby exposing the well head to irrigation wastewater.

Semi-permanent or permanent well structures are structures such as well houses used to protect wellhead from irrigation wastewater or manure. They may include 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). Structure must prevent damage from livestock, when livestock may be present. Structure must prevent wastewater or manure from contacting the wellhead. Structure may be constructed of plywood, corrugated or sheet metal, fiber glass, etc.

5. Part III.A.5(a)(3)(iii) was revised 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 (italicized): "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.*"
6. Part III.A.6. 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 (italicized): "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."
7. Part III.12 that stated, "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." was reworded for clarity. The revised section reads as follows:

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

“A permittee authorized as a Large CAFO must develop and implement a NMP 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. The NMP shall be certified by an individual or employee of an entity identified in Part III.A.14(b) of this general permit.”

8. Part III.12(b)(6) that stated, “Any other factors necessary to determine the amounts of nitrogen and phosphorus to be applied in accordance with the Narrative Rate Approach” was revised to reference the general permit. The revised section reads as follows:

“Any other factors necessary to determine the amounts of nitrogen and phosphorus to be applied in accordance with this general permit.”

9. Part III.16(b)(1)(i) that stated, “a playa is used as a RCS, as required by Texas Water Code §26.048, or” was revised to read as follows:

“a playa is used as a RCS, as allowed by Texas Water Code §26.048, or.”

D. Part IV.B. Reporting and Recordkeeping

The dates for the reporting periods 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.

E. Part V. Standard Permit Conditions

Part V.O has been added to address electronic-reporting (e-reporting) requirements codified in 40 CFR Part 127. The section issues a general waiver from e-reporting to applicants seeking coverage and permittees that are authorized under this general permit.

Currently, this GP requires that certain applications contain technical documents that must be reviewed for permit compliance; and a public notice for certain application types. TCEQ has determined that electronic reporting is not conducive to permit applications that require technical reviews and public notice. Technical reviews typically result in multiple iterations of a permit application. These multiple iterations, if handled by an electronic system, would make it much more difficult for TCEQ staff to review. Additionally, the public notice documents (eg. the technical summary, the public notice document, newspaper tearsheets, and newspaper affidavits) are generated and stored in paper format. The result would be an administrative record that was made up of multiple electronic iterations and a paper file. A mixed media record for a single permit action (application submission through permit issuance) would complicate and potentially inhibit the public review during the public comment period as well as complicate the archival record.

F. Abbreviations

A list of abbreviations and their meanings has been added to the last page of the permit.

- G. Appendix II** - AFO/CAFO Permit 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
(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.

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

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 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 permit. 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 of animals, the type and size of RCSs, the estimated amount of manure,

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

sludge, and wastewater generated annually and transferred off-site annually, and the acreage of LMUs and the estimated application rates.

- 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 general permit are applicable to the proposed discharges and that the applicant agrees to comply with the conditions of the general permit. 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 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 based on whether the NOI and technical application meet the requirements of the general permit. 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 general permit 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 general permit by providing a NOT on a form approved by the ED. A NOT must be submitted in the following instances: when a CAFO is not operational within 18 months after authorization, or at the expiration of the requested and granted 18 months extension, when a NOI is submitted by a new permittee when the facility ownership changes, when submitting an individual permit application to replace general permit authorization, with certification by a

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

licensed Texas Professional Engineer that closure of the facility is completed, or 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 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 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 general permit. The facility does not have to be operating at the maximum number of animals authorized to be considered operational.

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.

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

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.

After notice of the general permit 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 permit.

Any person, agency, or association may make a request for a public meeting on the proposed general permit 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 draft general permit. 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 general permit.

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 draft general permit raised during the public comment period, including those received at any CAFO general permit 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 general permit.

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

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