

**FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION GENERAL PERMIT
WQG200000**

Issuing Office: Texas Commission on Environmental Quality
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Permit Action: Amendment with Renewal of a General Permit

I. Summary

The Texas Commission on Environmental Quality (TCEQ) is proposing to reissue General Permit WQG200000, issued November 10, 2008, which authorizes the disposal of wastewater by evaporation or beneficial irrigation adjacent to water in the state from livestock manure compost operations. This general permit does not authorize discharge of wastewater into surface water in the state. The general permit specifies which facilities must obtain permit coverage, which are eligible for exclusion from permit requirements, and which may be required to obtain individual permit coverage.

II. Executive Director's Recommendation

The executive director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. It is proposed that the permit be issued to expire five years from the effective date following the requirements of 30 Texas Administrative Code (TAC) §205.5(a).

III. Permit Applicability

- A. This general permit authorizes the disposal of wastewater generated from livestock manure composting operations and processes, including livestock manure composted with exempt compost materials as defined in 30 TAC §332.3. Livestock manure is defined in the draft general permit as manure (feces and urine), litter, bedding, or feed waste from animal feeding operations. This authorization is inclusive of any retention facility, control facility, storage or processing areas for livestock manure, compost material derived from livestock manure, livestock manure composted with exempt compost material, and storage of finished compost product.
- B. The following are not eligible for general permit coverage:
- (1) No discharge is allowed into any surface water in the state. Discharge adjacent to water in the state by disposal of wastewater by irrigation or evaporation is allowed only under the conditions described in this permit.

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- (2) This general permit does not authorize the disposal of wastewater generated from livestock manure composting operations and processes which occur at a facility either permitted or otherwise authorized by the Commission as a concentrated animal feeding operation (CAFO). The discharge or disposal of wastewater occurring at these facilities must be authorized under a separate permit or authorization.
- C. Additional authorization may be required for discharges into or adjacent to water in the state, located within ten stream miles upstream of the Edwards Aquifer recharge zone, as defined in 30 TAC Chapter 213, *Edwards Aquifer*.
- D. Facilities that recycle all wastewater, including stormwater associated with industrial activities, back into the composting process, and that do not dispose of wastewater by land irrigation or evaporation, are not required to be authorized by this general permit.
- E. This general permit does not authorize the storage, processing, or disposal of solid waste, including livestock manure, compost, or exempt compost materials. It is the responsibility of any person conducting such activities to comply with any applicable requirements of the Commission, as described in 30 TAC Chapters 312, 330, 332, and 335, *Sewage Sludge Use, Disposal, and Transportation, Municipal Solid Waste, Composting, and Industrial Solid Waste and Municipal Hazardous Waste, respectively*.
- F. The executive director will 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 disposal activities will not maintain existing uses of receiving waters. Additionally, the executive director may cancel, revoke, or suspend authorization for disposal under this general permit based on a finding of historical and significant noncompliance with the provisions of this general permit. The executive director shall deny or suspend a facility's authorization for disposal under this general permit based on a rating of "unsatisfactory performer" according to commission rules in 30 TAC §60.3, *Use of Compliance History*.

IV. Permit Limitations and Requirements

- A. Eligible facilities must develop and implement a Technical Report that shall include the design of the retention facility and irrigation system, site drawings, information regarding geological formations that may provide a hydrologic connection for surface water to recharge groundwater, a soil survey, and an assessment of the impact of wastewater irrigation on the uses and water quality of local groundwater resources.
- B. A licensed Texas professional engineer shall design retention facilities and irrigation systems in a manner that limits hydraulic and nutrient application rates and wastewater storage needs.

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- C. All retention facilities shall be designed and maintained to prevent any discharge to surface water in the state and to prevent groundwater contamination. The design shall include a top freeboard of not less than two feet. Retention facilities shall not be located in the 100-year flood plain unless protected from inundation and damage that may occur during that flood event.
- D. Retention facility design for irrigation systems shall be based on the larger of:
 - (1) a 25-year/24 hour storm event; or
 - (2) the highest annual rainfall amount and the lowest annual evaporation from 25 years of meteorological records.
- E. Retention facility design for evaporation systems shall be based on the larger of two evaluations:
 - (1) average rainfall conditions, and
 - (2) lowest net evaporation conditions in the last 25 years.
- F. The wastewater irrigation system must be designed and operated to prevent a discharge from entering surface water in the state.
- G. The wastewater irrigation system must be designed and operated in a manner not to exceed an irrigation application rate as determined by the water balance study, 3.2 acre-feet wastewater/acre/year, or 100 pounds organic material/acre/day, whichever is more stringent.
- H. Soil samples shall be collected prior to commencing wastewater irrigation and annually thereafter. Wastewater shall not be applied to an area with an extractable phosphorus level of greater than 200 mg/kg.
- I. The wastewater shall be tested at the time irrigation is initiated and at a frequency of once every three months for 5-day biochemical oxygen demand, total nitrogen, total phosphorus, and total dissolved solids.
- J. The permittee shall maintain records of all wastewater that is beneficially used by irrigation or that is used in the production of compost.

V. Changes From Existing General Permit

- A. Included definitions for Edwards Aquifer and Edwards Aquifer Recharge Zone.
- B. Revised the definition of Control Facility so that it applies only to structures used to collect and store solid materials. Structures that collect and store wastewater are defined as a retention facility.

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- C. Revised the definition of Hydrologic Connection so that it applies to any surface to groundwater interflow and exchange, not just from wastewater or solid material storage areas.
- D. Revised language in the permit to use consistent terminology, specifically for retention facility and wastewater irrigation areas.
- E. Updated the contact information for TCEQ Austin Regional Office.
- F. Added additional limitations on coverage related to compliance history rating of "unsatisfactory performer".
- G. Added language related to electronic submittal of Notices of Termination (NOT).
- H. Clarified that retention facility closure requirements must be completed prior to submitting a NOT.
- I. Revised the retention period from three years to five years for records, reports, drawings, certifications, and other documentation required by this permit. This proposed five years ensures these documents are retained for the full five year term of the permit.
- J. The Engineering Report was re-named Technical Report. The report includes items, such as geology, soils, and groundwater quality, that may not be related to engineering.
- K. Removed the requirement for the site drawing to include information related to adjacent property and adjacent landowners. The permit does not require the permittee to utilize this information in any way. Additionally, it may be difficult for the permittee to maintain up-to-date information on adjacent landowners, as well as for TCEQ to determine that the information is accurate.
- L. Removed the requirement to develop actions related to closure of retention facilities in the Technical Report. Development of closure activities is only needed if retention facilities or tail water control facilities are planned to be closed. Closure requirements are more fully addressed in Part III.B.4. of the permit.
- M. Clarified that evaporation systems must be designed based upon the larger of two evaluations.
- N. Included the Texas Certified Crop Advisor's Board as a certifying agency for nutrient management specialists.
- O. Added a requirement that soil samples be analyzed within 30 days of collection to maintain sample integrity.
- P. Added a requirement to analyze soil samples for Total Kjeldahl Nitrogen, Total

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- Nitrogen, and Water-Soluble Sodium, Calcium, and Magnesium, and added a requirement to add soil amendments to adjust the soil if the Sodium Adsorption Ratio is greater than 10. These additional requirements are consistent with TLAP individual permits.
- Q. Added a requirement that wastewater samples must be analyzed by a NELAC certified laboratory.
 - R. Added a requirement that soil sample results be kept in the irrigation records.
 - S. Removed the requirement for records of application rate when wastewater is used to assist in the production of compost. The permit does not regulate the application rate of wastewater used in the production of compost.
 - T. Deleted the reference to the retention facility cleaning notification schedule in Part III.C.5.j. This reference conflicted with the notification schedule in Part III.C.5.h.

VI. Addresses

Questions concerning this draft general permit should be directed to:

Laurie Fleet
Wastewater Permitting Section (MC-148)
TCEQ
P.O. Box 13087
Austin, TX 78711-3087
(512) 239- 5445

Comments regarding this proposed draft general permit should be sent to:

Chief Clerk's Office (MC-105)
TCEQ
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. Requirements for the Protection of Groundwater and Monitoring
- XIII. Procedures for Final Decision
- XIV. Administrative Record

VII. Legal Basis

Section 26.121 of the Texas Water Code (TWC) 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 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 §26.040 provides the Commission with authority to develop and issue general permits.

The TCEQ developed regulations in 30 TAC Chapter 205, which form the basis for development of general permits. Chapter 205 describes when it is permissible to issue a general permit, the procedural requirements for the involvement of the public in the permitting process, how qualified dischargers can obtain authorization under a general permit, the manner in which permit terms are developed, how general permits are amended or renewed, and the fees that are assessed on dischargers authorized under the permit.

This permit is proposed under state authority and is not a Texas Pollutant Discharge Elimination System (TPDES) permit, since the permit would not authorize any discharge into waters of the United States as defined under the federal Clean Water Act (CWA) and National Pollutant Discharge Elimination System (NPDES) requirements.

Neither national nor state guidelines establishing technology-based effluent limits have been promulgated for composting operations which dispose of wastewater adjacent to water in the state. Due to the lack of federal guidelines, the requirements for these disposal activities have, therefore, been established using best professional judgment.

VIII. Regulatory Background

The TCEQ adopted a general permit for disposal of wastewater from livestock manure compost facilities that will expire on November 10, 2008. The executive director now proposes, with the reissuance of this proposed general permit, to continue to authorize the disposal of wastewater under TCEQ General Permit No. WQG200000.

Consistent with 30 TAC §205.2, issuance of this permit is allowable, since qualifying composting operations engage in substantially similar operations and would dispose of the same type of waste. The general permit, if issued, would establish the same operating conditions and similar monitoring requirements for these facilities. These types of disposal activities are more appropriately regulated under a general permit based upon the requirements of §205.2(a)(5), inasmuch as the TCEQ can readily enforce the general permit and can monitor compliance of the terms of the permit. The permit would establish monitoring, record keeping, and reporting requirements. The permit also establishes requirements for the protection of underlying groundwater, prohibits any discharge into surface water, and thus, is not expected to result in an adverse effect on the quality of either resource.

IX. Permit Coverage

- A. All applicants seeking authorization to dispose of wastewater under this general permit must submit a completed Notice of Intent (NOI) on a form approved by the executive director. Existing permittees authorized under the expiring general permit are required to submit a new NOI within 90 days of issuance of the general permit to continue authorization. The general permit identifies the minimum required information on a NOI form.
- B. Submission of a NOI is an acknowledgment that the conditions of this general permit are applicable to the proposed disposal activity, and that the applicant agrees to comply with the conditions of this general permit. Provisional authorization to dispose of wastewater 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 TCEQ provides for electronic submission of NOIs during the term of this permit, provisional authorization begins immediately following confirmation of receipt of the electronic NOI form by the TCEQ.
- C. Authorization under this general permit is not transferable. If the owner or operator of the facility changes, the present owner and operator must submit a Notice of Termination (NOT) and the new owner and operator must submit a NOI. 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. The NOT and NOI must be submitted no later than 10 days prior to the changes to avoid a lapse in authorization for the facility.
- D. If the owner or operator becomes aware that they failed to submit any relevant facts, submitted incorrect information in a NOI, or that information provided in the NOI changes (for example, permittee address, or information related to wastewater irrigation areas, retention facilities, or control facilities), the correct information must be provided to the executive director in a Notice of Change (NOC) within 14 days after discovery. A NOC is not applicable for changes in ownership, operator, or a change in the site location. For these types of changes, a NOT and a new NOI must be submitted.
- E. A permittee shall terminate coverage under this general permit through the submittal of a NOT, on a form approved by the executive director, when the owner or operator of the facility changes, when disposal becomes unnecessary, is delayed, or is authorized under an individual permit. Authorization to dispose of wastewater terminates at midnight on the day that a NOT is postmarked for delivery. If the TCEQ provides for electronic submission of NOTs, authorization under this permit terminates immediately following confirmation of receipt of the electronic NOT form by the TCEQ. A NOT must be submitted within 10 days after the facility completes the closure requirements in Part III.B.4., obtains coverage under an individual permit, or obtains coverage under an alternative general permit. Compliance with the conditions and requirements of this permit are required until a NOT is submitted.

- F. The executive director will 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 disposal activities will not maintain existing uses of receiving waters. Additionally, the executive director may cancel, revoke, or suspend authorization for disposal under this general permit based on a finding of historical and significant noncompliance with the provisions of this general permit. The executive director shall deny or suspend a facility's authorization for disposal under this general permit based on a rating of "unsatisfactory performer" according to commission rules in 30 TAC §60.3, *Use of Compliance History*. Denial of authorization for disposal under this general permit will be done according to commission rules in 30 TAC Chapter 205, *General Permits for Waste Discharges*.

X. Technology-Based Requirements

The regulations promulgated in Title 40 of the Code of Federal Regulations which require technology-based limitations be placed in wastewater discharge permits based on effluent limitations guidelines do not apply to this general permit which only allows for the disposal of wastewater by irrigation or evaporation.

XI. Water Quality-Based Requirements

The Texas Surface Water Quality Standards found at 30 TAC Chapter 307 state that "surface waters will not be toxic to man from ingestion of water, consumption of organic organisms, or contact with the skin, or to terrestrial or aquatic life". This general permit does not authorize a discharge into surface waters in the state, therefore no water quality based requirements for the protection of surface waters are proposed. The permit does however require provisions to prevent runoff of excessive concentrations of phosphorus from soils irrigated with wastewater.

Phosphorus has been identified as the limiting nutrient in both the North Bosque River (Segment 1226) and the Upper North Bosque River (Segment 1255) and a Total Maximum Daily Load (TMDL) has been developed for these locations. Part III.C. of the permit requires that the permittee conduct annual soil testing, submit the results to the TCEQ, and not apply wastewater to a wastewater irrigation area with a phosphorus concentration greater than 200 mg/kg in Zone 1. Permit conditions also require the permittee to evaluate the ability to comply with all conditions of the general permit, without the use of wastewater irrigation in the affected area.

XII. Requirements for the Protection of Groundwater

- A. The permittee shall notify the appropriate TCEQ regional office at least 48 hours before putting into operation any new or replacement retention facility.
- B. The permittee shall notify the appropriate TCEQ regional office at least 48 hours before the initial operation of any irrigation system.

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- C. The permittee shall develop a technical report which outlines the design of the retention facility and irrigation system to ensure that adequate capacity exists for the storage of wastewater and the application of wastewater via irrigation is at the appropriate agronomic rate.
- D. All retention facilities must be constructed with compacted soil or acceptable synthetic membrane linings.
- E. Closure of a retention facility includes the development of a closure plan, a final report of closure activities, and a closure certification by a licensed Texas professional engineer. A closure plan describes the actions that will be taken to ensure that all wastes will be removed and disposed of properly.
- F. The wastewater irrigation system must be designed to prevent an organic material loading to the soil of greater than 100 pounds/acre/day.
- G. Annual soil testing of wastewater irrigation areas must be conducted to prevent undesirable buildup of nutrient levels while also aiding the permittee in the optimal management of crops.
- H. Quarterly analysis of wastewater effluent is required for 5-day biochemical oxygen demand, total nitrogen, total phosphorus, and total dissolved solids.
- I. The permittee is required to maintain records of irrigation.
- J. The permittee must maintain and repair any damage to a retention facility liner.

XIII. Procedures for Final Decision

30 TAC Chapter 205 requires that when a draft general permit is proposed, notice must be published in the *Texas Register* and in at least one newspaper in the state with statewide or regional circulation. The commission may also publish notice in additional newspapers of statewide or regional circulation. Notice must also be provided to the following:

- A. the county judge of the county or counties in which disposal under the general permit could be located;
- B. persons on a relevant mailing list kept under 30 TAC §39.407, relating to Mailing Lists; and
- C. any other person the executive director or chief clerk may elect to include.

The public will have 30 days to provide public comment on the proposed general 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 executive director or commission determines, on the basis or

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requests, that a significant degree of public interest in the draft general permit exists. A public meeting is intended for the taking of public comment, and is not a contested case proceeding under the Administrative Procedure Act.

If the executive director calls a public meeting, the commission will give notice of the date, time, and place of the meeting, as required by commission rule. The executive director shall prepare a response to all public comments on the draft general permit raised during the public comment period. The general permit will then be filed with the commission to consider final authorization of the permit. The executive director's response to public comment shall be made available to the public and filed with the chief clerk at least ten days before the commission acts on 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. Permits and Authorizations:

Existing General Permit No. WQG200000.

Concentrated Animal Feeding Operations permitted under General Permit No. TXG920000 or an individual permit issued under 30 TAC 321, Subchapter B

B. Rules:

30 TAC Chapters 39, 50, 60, 205, 213, 305, 307, 309, 312, 330, 332, and 335
TWC §§ 5.103, 5.105, 26.001, 26.014, 26.027, 26.040, and 26.121
Texas Health and Safety Code §§361.017, 361.024, 361.032-361.033, and 361.037
CWA §303(d)
40 Code of Federal Regulations

C. Miscellaneous:

Status Report: Implementing TMDLs to Reduce Phosphorus, Improving Water Quality in the North Bosque River. May 2012