

FACT SHEET AND EXECUTIVE DIRECTOR'S FINAL DECISION GENERAL PERMIT WQG100000

Issuing Office: Texas Commission on Environmental Quality
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Date: June 2025

Permit Action: Renewal with Amendment

I. Summary

The Texas Commission on Environmental Quality (TCEQ or commission) is issuing a renewal with amendment of General Permit No. WQG100000, which authorizes wastewater generated by industrial or water treatment facilities to be disposed of by evaporation from surface impoundments adjacent to water in the state. This general permit does not authorize the discharge of wastewater into water in the state. The draft general permit specifies the types of wastewaters that are not eligible for authorization, and other criteria that would limit a facility's ability to qualify for authorization under the general permit.

II. Executive Director's Recommendation

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

III. Permit Applicability

- A. The draft permit authorizes wastewater generated by industrial or water treatment facilities to be disposed of by evaporation from surface impoundments adjacent to water in the state.
- B. Limitations on Authorization:
 - 1. This general permit does not authorize disposal of wastewater that:
 - a. has an oil and grease concentration greater than 100 milligrams per liter;
 - b. has a pH that is:
 - i. less than 5.0 standard units;
 - ii. more than 10.0 standard units;

- iii. outside the liner manufacturer's recommended pH range for synthetic liners; or
 - iv. corrosive to the evaporation pond liner.
 - c. creates a fire or explosion hazard;
 - d. contains any radioactive substances, hazardous wastes, or medical wastes;
 - e. contains constituents that will inhibit evaporation, or are incompatible with or would damage the evaporation pond liner;
 - f. is regulated under another wastewater general permit; or
 - g. consists solely of domestic wastewater, subject to the requirements of 30 TAC Chapter 309, *Domestic Wastewater Effluent Limitation and Plant Siting*.
2. This general permit does not authorize discharge of wastewater into water in the state. Discharge by disposal of wastewater by evaporation from surface impoundments adjacent to water in the state is allowed only under the conditions described in this general permit.
 3. Industrial and water treatment facilities that are located in areas of the state where the average annual rainfall exceeds the average annual lake surface evaporation rate are prohibited from obtaining authorization under this general permit. Average annual rainfall and average annual lake surface evaporation data for the area where the facility is located or proposed to be located must be obtained from the Texas Water Development Board.
 4. This general permit does not authorize the storage, processing, or disposal of solid waste. 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, 335, and 352, *Sludge Use, Disposal and Transportation, Municipal Solid Waste, Industrial Solid Waste and Municipal Hazardous Waste, and Coal Combustion Residuals Waste Management*, respectively.
 5. This general permit does not authorize the discharge or disposal of stormwater otherwise authorized by the Construction General Permit (TXR150000), the Multi-Sector General Permit (TXR050000), or an individual stormwater permit. It is the responsibility of any person conducting such activities to obtain authorization under the Construction General Permit (TXR150000), the Multi-Sector General Permit (TXR050000), or an individual stormwater permit.
 6. This general permit does not authorize the discharge or disposal of wastewater generated at a Concentrated Animal Feeding Operation, as defined in 30 TAC Chapter 321, Subchapter B, *Concentrated Animal Feeding Operations*.
 7. This general permit does not authorize evaporation ponds at oil and gas facilities, which are regulated by the Railroad Commission of Texas.
 8. This general permit does not authorize disposal of wastewater where prohibited by 30 TAC Chapter 213, *Edwards Aquifer*, 30 TAC Chapter 311, *Watershed Protection Rules*, or any other state statute, rule, or regulation.
 9. 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*. The executive director shall deny an application for authorization under this general permit for any of the reasons described in 30 TAC §§ 205.4(c)(2)(A) - (F). 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 authorization denied or suspended, in accordance with TWC, § 26.040(h). 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*. If authorization for disposal is denied under this general permit, the executive director may require the person whose authorization is denied to apply for an individual permit.

10. The executive director may deny an application for authorization under a general permit, and may require that the applicant apply for an individual permit, for any of the reasons described in 30 TAC §§ 205.4(c)(3)(A) - (F). 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.

IV. Permit Limitations and Requirements

- A. All evaporation ponds shall be designed by a licensed Texas professional engineer and be maintained to prevent any discharge into water in the state.
- B. Evaporation pond sizing shall be based on whichever of the following two evaluations results in a larger capacity pond: average conditions or critical conditions. Both evaluations must use the example water balances provided in Appendix A of the draft general permit. For evaporation ponds that were constructed prior to September 15, 2015 that do not comply with the sizing requirements, the permittee shall implement measures or provide additional storage to store and dispose of the additional wastewater as provided in the draft general permit.
- C. Evaporation ponds shall be designed with a volume allocation for solids accumulation based on the expected settleable solids content of the wastewater. The design shall include a top freeboard of not less than two feet.
- D. All evaporation ponds shall be constructed according to requirements identified in the draft permit, except evaporation ponds for which: (1) a notification was provided to the TCEQ in accordance with 30 TAC § 335.2(h) and § 335.6 that was acknowledged, in writing, prior to September 15, 2015; or (2) a water quality Texas Land Application Permit was issued prior to September 15, 2015. The construction requirements include a pond liner, embankment wall construction and stabilization, location setbacks from water wells and odor receptors.
- E. The permittee shall measure the solids volume in each evaporation pond every five years or at a frequency equal to the design period used to calculate the solids volume allocation, whichever is sooner. Solids shall be removed from the evaporation pond to prevent the solids volume from exceeding the designed volume allocation for solids accumulation.

- F. Wastewater grab samples shall be collected and analyzed quarterly for pH, total suspended solids, and oil and grease.
- G. The permittee shall make a visual inspection of each evaporation pond weekly and keep a record of inspections onsite for five years from the date of each inspection. The inspection shall document:
 - 1. the wastewater level;
 - 2. the presence of scum, floating solids, or floating vegetation;
 - 3. if erosion of the embankment has occurred;
 - 4. if trees, shrubs, or other woody vegetation is growing in the evaporation pond or on the embankment;
 - 5. if the synthetic liner is torn, punctured, or deteriorated; and
 - 6. if leak detection and collection systems, if applicable, are in proper working condition and if a leak has occurred.
- H. The permittee shall take corrective action within 24 hours after a visual inspection that identifies a wastewater level that may cause an overflow; scum, floating solids, or floating vegetation in the evaporation pond; embankment erosion; trees, shrubs, or other woody vegetation growing in the evaporation pond or the embankment; faulty leak detection systems; or leaks from the evaporation pond liner or embankment. Leaking evaporation ponds shall be removed from service either until repairs are made or replacements are constructed.

V. Changes From Existing General Permit

- A. Modified the definition for Permittee to specify, "Any person issued an individual permit or order or is authorized ~~[covered]~~ by a general permit."
- B. Updated the definition for Water in the State to specify "Gulf of America".
- C. Updated the word Coverage to Authorization through the draft permit.
- D. Updated Part II, Section B.1.d, to clarify that hazardous wastes as defined under 30 TAC § 330.3(65) may not be authorized for disposal under this general permit.
- E. Revised Part II, Section B.1, to include new provision II.B.1.e clarifying that wastewater which emits one or more air contaminants as defined under Texas Clean Air Act Section 382.003(2) or combination of air contaminants in such concentration and of such duration that are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property; or interfere with the normal use or enjoyment of animal life, vegetation, or property may not be authorized for disposal under this general permit.
- F. Updated Part II, Section C.3, with current contact information for the Edwards Aquifer Protection Program and corrected the counties listed in the general permit for consistency with requirements under 30 TAC Chapter 213, *Edwards Aquifer*.
- G. Updated Part III, Section A.7.a, to add the option for email and clarify the mailing address for submission of written reports.

- H. Revised Part III, Section B.1.d, to clarify that the design of the evaporation pond shall include a top freeboard of not less than two feet above the normal operating level for consistency with requirements under 30 TAC § 217.203, *Design Criteria for Natural Treatment Systems*.
- I. Revise and restructure Part III, Section B.2, relating to evaporation pond construction requirement, as follows:
1. Establish more stringent requirements for evaporation ponds constructed on or after the effective date of this permit to ensure consistency with design criteria under 30 TAC § 217.203, *Design Criteria for Natural Treatment Systems*, as follows:
 - a. soil liner material:
 - i. clay-rich soil material should have a liquid limit greater than ~~or equal to~~ 30%;
 - ii. liner material shall be compacted in lifts of no more than six [8] inches after compaction to 95% standard proctor density at -1 to +3% of optimum moisture [~~content~~] in accordance with ASTM D 698;
 - b. a synthetic liner may not be subject to degradation due to constant sunlight;
 - c. the liner should extend from the lowest elevation in an evaporation pond up to an elevation of 2.0 feet above normal water elevation; and
 - d. soil embankment walls:
 - i. shall have a top width of ten [~~five~~] feet;
 - ii. shall have interior and exterior slopes no steeper than one foot vertical to four [~~three~~] feet horizontal, unless alternate methods of slope stabilization are utilized;
 - iii. must be constructed of material compacted in lifts no greater than six inches to 95% standard proctor density at -1% to +3% of optimum moisture; and
 - iv. shall be protected by a vegetative cover with a minimum cover of 6.0 inches of topsoil or other stabilizing material, excluding brush and trees, to prevent erosion.
 2. Restructure and revise existing requirements to improve readability and clarify applicability, as follows:
 - a. Number existing requirement (previously contained within B.2) relating to evaporation ponds constructed prior to September 15, 2015, as B.2.a. Additionally, revise existing requirement language with current citation references for consistency with 30 TAC § 335.2, *Permit Required*, and to clarify applicability.
 - b. Number the existing requirement (previously contained within B.2) relating to evaporation ponds that contain coal combustion residuals as B.2.b.
 - c. Renumber existing requirements (previously B.2.a, B.2.a(1) and (2)), relating to soil and synthetic liner requirements, as B.2.c(1), B.2.c(1)(a) and (b). Revise

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- B.2.c(1) to specify applicability of the existing requirements to evaporation ponds constructed on or after September 15, 2015, and prior to September 15, 2025.
- d. Add new provisions B.2.c(2), B.2.c(2)(a) and B.2.c(2)(b), to establish more stringent liner requirements for evaporation ponds constructed on or after September 15, 2025 (see items described under item 7.a above).
 - e. Consolidate and renumber existing provisions (previously B.2.b, B.2.c, and B.2.d), relating to construction requirements for leak detection systems, soil embankment walls, and buffer requirements, as new B.2.d(1), B.2.d(2), and B.2.d(3), respectively. Revise B.2.d to specify applicability of the provisions to evaporation ponds constructed on or after September 15, 2015.
 - f. Subsequent existing requirements were reorganized and renumbered.
3. Update existing provision B.2.d(1), relating to leak detection systems (formerly B.2.b), to clarify that the engineering report and certification required by this general permit must be submitted to the appropriate TCEQ Regional Office prior to putting an evaporation pond into service for consistency with 30 TAC § 217.10, Final Engineering Report.
- J. Updated Part III, Section C.3.d, from Texas Health and Safety Code Chapter 361, *Solid Waste Disposal Act*, to 30 TAC Chapter 330, *Municipal Solid Waste*.
- K. Other non-substantive changes.

VI. Addresses

Questions concerning this draft general permit should be directed to:

Shannon Gibson
Wastewater Permitting Section (MC-148)
TCEQ
P.O. Box 13087
Austin, TX 78711-3087
(512) 239-4284

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:

- VI. Legal Basis
- VII. Regulatory Background
- VIII. Permit Authorization
- IX. Technology-based Requirements
- X. Water Quality-based Requirements
- XI. Requirements for the Protection of Groundwater
- XII. Procedures for Final Decision

XIII. Administrative Record

VII. Legal Basis

TWC, § 26.121 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 TWC, § 26.040 provides the commission with authority to develop and issue general permits.

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 permit, since the permit would not authorize any discharge into waters of the United States as defined under the federal Clean Water Act and National Pollutant Discharge Elimination System requirements.

Neither national nor state guidelines establishing technology-based effluent limits have been promulgated for facilities that dispose of wastewater by evaporation. 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 executive director proposes to issue the proposed general permit, which would authorize wastewater generated by industrial or water treatment facilities to be disposed of by evaporation from surface impoundments adjacent to water in the state.

Consistent with 30 TAC § 205.2, issuance of this permit is allowable, since the general permit, if issued, would establish the same operating conditions and similar monitoring requirements for industrial and water treatment facilities that dispose of wastewater by evaporation from surface impoundments adjacent to water in the state. These types of disposal activities are more appropriately regulated under a general permit based upon the requirements of 30 TAC § 205.2(a)(5), inasmuch as TCEQ can readily enforce the general permit and can monitor compliance of the terms of the permit. The permit would establish monitoring, recordkeeping, and reporting requirements. The permit would also establish requirements for the protection of underlying groundwater, and prohibit any discharge into water in the state, and thus, is not expected to result in an adverse effect on the quality of either resource.

IX. Permit Authorization

- A. All applicants seeking initial authorization to dispose of wastewater under the general permit must submit a completed Notice of Intent (NOI) on a form approved by the executive director.
- B. Submission of an NOI is an acknowledgment that the conditions of the general permit are applicable to the proposed disposal, and that the applicant agrees to comply with the conditions of the general permit. Provisional authorization to dispose of wastewater under the terms and conditions of the general permit begins 48 hours after a completed NOI is postmarked for delivery to TCEQ. If TCEQ provides for electronic submission of NOIs during the term of the permit, provisional authorization begins immediately following confirmation of receipt of the electronic NOI form by the TCEQ.
- C. Authorization under the general permit is not transferable. If the owner or operator of the regulated entity changes, the present owner and operator shall submit a Notice of Termination (NOT) and the new owner and operator shall submit an 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 or submitted incorrect information in an NOI or that information provided in the NOI changes (for example, permittee address or details about an evaporation pond), the correct information shall be provided to the executive director in a Notice of Change (NOC) within 14 days after discovery. An NOT and a new NOI are required for a change in the site location or changes in ownership or operator.
- E. A permittee shall terminate authorization under this general permit through the submittal of an 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 on the day that an NOT is postmarked for delivery. If TCEQ provides for electronic submission of NOTs, authorization under this permit terminates immediately following confirmation of receipt of the electronic NOT form by TCEQ. An NOT must be submitted within 10 days after the facility completes the closure requirements in Part III.B.3., obtains authorization under an individual permit, or obtains authorization under an alternative general permit.

X. Technology-Based Requirements

The regulations promulgated in 40 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 would only allow for the disposal of wastewater by evaporation from surface impoundments adjacent to water in the state.

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." The draft general permit does not authorize a discharge into water in the state. Therefore, no water quality based requirements for the protection of surface waters are proposed. However, the draft general permit includes requirements related to the design, construction, and operation of evaporation ponds to protect water quality.

- A. Evaporation ponds shall be sized based on the larger of two evaluations: average conditions and critical conditions. For evaporation ponds that were constructed prior to September 15, 2015 that do not comply with the sizing requirements, the permittee shall implement measures or provide additional storage to store and dispose of the additional wastewater. The design shall include a top freeboard of not less than two feet.
- B. Evaporation ponds shall be designed with a volume allocation for solids accumulation based on the expected settleable solids content of the wastewater. The permittee shall measure the solids volume in each evaporation pond every five years or at a frequency equal to the design period used to calculate the solids volume allocation, whichever is sooner. Solids shall be removed from the evaporation pond to prevent the solids volume from exceeding the designed volume allocation for solids accumulation.
- C. The permittee shall conduct weekly visual inspections of the evaporation pond and take corrective action within 24 hours after a visual inspection that identifies a wastewater level that may cause an overflow.

XII. Requirements for the Protection of Groundwater

- A. The permittee shall notify the appropriate TCEQ regional office at least one calendar week before putting into operation any new or replacement evaporation pond.
- B. Each evaporation pond shall be constructed with either a clay liner or a synthetic liner. The draft permit specifies the design and construction criteria for each type of liner. The liner and any required leak detection and collection system must be certified by a licensed Texas professional engineer. Evaporation ponds for which: (1) a notification was provided to TCEQ in accordance with 30 TAC§ 335.2(h) and § 335.6 that was acknowledged, in writing, prior to September 15, 2015; or (2) a water quality Texas Land Application Permit was issued prior to September 15, 2015 are not required to comply with the specific construction requirements in this permit.
- C. In designing the evaporation pond, the engineer shall generate a report that identifies:
 - 1. the existence of any geological formations such as faults or sinkholes at the facility, which may provide a hydrologic connection for stored wastewater to recharge groundwater.
 - 2. soil types and standard classifications for the location of each evaporation pond. Soil surveys compiled by the United States Department of Agriculture

Natural Resources Conservation Service shall be utilized where available. Design aspects related to wastewater seepage shall address the soil's physical and chemical properties, and hydraulic characteristics. Soil limitations should also be addressed such as, but not limited to, rapid permeability, seasonal perched groundwater, and decreased available water capacity.

3. the impact of wastewater seepage on the uses and water quality of local groundwater resources. The design of evaporation ponds must preclude the migration of wastewater and recharge into the underlying groundwater.
- D. The permittee must maintain any evaporation pond liner to inhibit infiltration of wastewater. The permittee shall conduct weekly visual inspections of the evaporation pond and take corrective action within 24 hours after a visual inspection that identifies a wastewater level that may cause an overflow; scum, floating solids, or floating vegetation in the evaporation pond; embankment erosion; trees, shrubs, or other woody vegetation growing in the evaporation pond or the embankment; faulty leak detection systems; or leaks from the evaporation pond liner or embankment. Any mechanical or structural damage to the liner shall be evaluated by a licensed Texas professional engineer within 30 days of the damage. A licensed Texas professional engineer must complete an onsite evaluation of each evaporation pond every five years.
- E. Closure of an evaporation pond 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.

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, *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 of 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. TCEQ Rules

30 TAC Chapters 39, 50, 60, 205, 213, 217, 305, 307, 309, 312, 330, 332, 335, 336, and 350

B. Statutes

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

C. Letters/Memoranda/Records of Communication

WQG100000 Groundwater Review, Interoffice Memorandum from the Water Quality Assessments Team (A. Hoh) dated September 12, 2024.