FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

For renewal with amendment of Texas Pollutant Discharge Elimination System (TPDES) General Permit No. TXG130000 for discharges into or adjacent to water in the state.

Issuing Office: Texas Commission on Environmental Quality

P.O. Box 13087

Austin, TX 78711-3087

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Wastewater Permitting Section

Water Quality Division

Date: July 2025

Permit Action: Renewal with Amendment

# I. Summary

The Texas Commission on Environmental Quality (TCEQ or commission) is proposing to renew and amend the TPDES general permit authorizing discharges into or adjacent to water in the state by aquaculture facilities and other activities related to aquaculture. Permit eligibility is divided into five levels of authorization based on activity and size, with each level having specific regulatory requirements.

# 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 will expire five years from the effective date in accordance with the requirements of 30 Texas Administrative Code (TAC) § 205.5(a).

# III. Permit Applicability and Authorization

1. Eligibility for authorization under this general permit is divided into five levels: Level I, Level II, Level III, Level IV, and Level V.
2. Level I Facility. Operations meeting the following descriptions and criteria:
3. Retail bait dealers;
4. Discharges resulting from the production of crawfish in conjunction with rice farming;
5. Ponds used as pay lakes;
6. Facilities that exclusively utilize closed ponds;
7. Public or commercial aquariums;
8. Aquarium suppliers;
9. Live fish hauling tanks;
10. Any aquaculture facility that utilizes cages or other enclosures placed within public waters for the propagation or rearing of aquatic species with a harvest-weight equal to or less than 10,000 pounds per year, excluding facilities that meet the criteria of Level V; or
11. Facilities that temporarily hold and do not feed aquatic species, excluding facilities that meet the criteria of Level IV or Level V.
12. Level II Facility. Aquatic animal production facilities that meet one of the following criteria (a., b., or c.) and that do not produce shrimp in the coastal zone:
13. Produces cold water aquatic species in ponds, raceways, or other similar structures that:
14. discharge into water in the state less than 30 days per year; or
15. produce less than 20,000 pounds harvest-weight of aquatic species per year and feed less than 5,000 pounds of food during the calendar month of maximum feeding.
16. Produces warm water aquatic species in ponds, raceways, or other similar structures that:
17. discharge into water in the state less than 30 days per year; or
18. produce less than 100,000 pounds harvest-weight of aquatic species per year.
19. Disposes of wastewater by irrigation or evaporation and does not discharge into surface water in the state.
20. Level III Facility. Concentrated aquatic animal production facilities that meet or exceed the thresholds described below in either 3(a) or (b) or a shrimp research facility located inside the coastal zone that meets the criteria below in 3(c).
21. Produces cold water aquatic species in ponds, raceways, or other similar structures that discharge into water in the states at least 30 days per year; and either:
22. produce more than 20,000 pounds harvest-weight of aquatic species per year; or
23. feed 5,000 pounds or more of food during the calendar month of maximum feeding.
24. Produces warm water aquatic species in ponds, raceways, or other similar structures that:
25. discharge into water in the state at least 30 days per year; and
26. produce more than 100,000 pounds harvest-weight of aquatic species per year.
27. Shrimp research facility within the coastal zone that:
28. discharges into water in the state less than 60 days per year;
29. discharges at a daily maximum flow rate of less than 5 million gallons per day; and
30. discharges at a total monthly flow volume of less than 12.5 million gallons.
31. Level IV Facility. Concentrated aquatic animal production facilities that meet the thresholds of Level III and produce 100,000 pounds or more of aquatic species per year in a flow-through system or recirculating system.
32. Level V Facility. Aquaculture facilities that produce oysters in a net pen system or submerged cage, regardless of annual harvest-weight.
33. Limitations on Authorization
34. The following discharges are not eligible for authorization under this general permit and must apply for an individual permit prior to discharge:
35. Any commercial aquaculture facility that produces shrimp species in ponds, raceways, or similar structures within the coastal zone and that discharge into surface water in the state.
36. Any commercial aquaculture facility that produces shrimp species, is located within the coastal zone, and conducts collaborative research with a shrimp research facility and discharges into surface water in the state.
37. Any aquaculture facility that discharges to freshwater receiving waters with a total dissolved solids difference between the discharge and the receiving water greater than 500 milligrams per liter (mg/L).
38. Any aquaculture facility that discharges to an estuarine or marine receiving water with a salinity difference between the discharge and the receiving water greater than 2 parts per thousand (grams per liter).
39. Any aquaculture facility that utilizes cages or other enclosures placed within public waters for the propagation or rearing of aquatic species with a harvest-weight greater than 10,000 pounds, except Level V facilities.
40. Discharges are not authorized by this general permit where prohibited by:
41. 30 TAC Chapter 311 (relating to Watershed Protection Rules);
42. 30 TAC Chapter 213 (relating to the Edwards Aquifer);
43. 31 TAC Part 2, Chapter 57, Subchapter C (relating to Introduction of Fish, Shellfish and Aquatic Plants); or
44. Any other applicable rules or laws.
45. New sources or new discharges of the pollutant(s) of concern to impaired waters are not authorized by this permit unless otherwise allowable under 30 TAC Chapter 305 and applicable state law. Impaired waters are those that do not meet applicable water quality standards and are listed as category 4 or 5 in the latest EPA-approved version of the Texas Integrated Report of Surface Water Quality for Clean Water Act (CWA) Sections 305(b) and 305(d). Pollutants of concern are those pollutants for which a water body is listed as impaired.
46. Discharges of the pollutants(s) of concern to impaired water bodies when there is a TCEQ approved total maximum daily load (TMDL) implementation plan are not eligible for this permit unless they are consistent with the approved TMDL and the Implementation Plan. The executive director may amend this general permit or develop a separate general permit for discharges to these water bodies. For discharges not eligible for authorization under this permit, the discharger must apply for and receive an individual permit or other applicable general permit authorization prior to discharging.
47. Discharges that are associated with the processing of aquatic organisms by packing as fresh or frozen product, canning, smoking, salting, drying or otherwise curing, or rendering for use as human or animal food are not authorized by this general permit.
48. The discharge of domestic sewage into or adjacent to water in the state is not authorized by this general permit. All domestic sewage shall be either discharged pursuant to an individual permit issued by TCEQ; routed to an authorized and adequately designed sewage treatment facility or Publicly Owned Treatment Works (POTW); routed to on-site sewage facilities (septic systems) permitted by local authorities; or transported to an approved off-site disposal facility.
49. Facilities that dispose of wastewater by any of the following practices are not required to obtain authorization under this general permit:
50. recycling with no resulting discharge into or adjacent to water in the state;
51. pumping and hauling to an authorized disposal facility;
52. discharge to a POTW;
53. underground injection in accordance with 30 TAC Chapter 331; or
54. discharge to above ground storage tanks with no resulting discharge into or adjacent to water in the state.
55. 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 discharge will not maintain existing uses of receiving waters. Additionally, the executive director may cancel, revoke, or suspend authorization to discharge 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 discharge under this general permit based on a rating of “unsatisfactory performer” according to commission rules in 30 TAC §60.3, *Use of Compliance History*. 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 Texas Water Code (TWC) § 26.040(h). Denial of authorization for discharge under this general permit will be done according to commission rules in 30 TAC Chapter 205, *General Permits for Waste Discharges*.
56. The executive director may deny a Notice of Intent (NOI) to discharge under this general permit based on the potential or actual adverse impact. A determination of potential adverse impact may arise from consideration of such factors as proposed flow rate, production rate, or nature of the receiving stream. The executive director shall also consider any sensitive aquatic habitat in the coastal zone identified in the general guidelines developed by the Texas Parks and Wildlife Department (TPWD). In making a determination of potential adverse impacts, the executive director may also consider other factors, as necessary.
57. Discharges that would adversely affect a listed endangered or threatened species or its critical habitat are not authorized by this permit. Federal requirements related to endangered species apply to all TPDES permitted activities, and site-specific controls may be required to ensure that protection of endangered or threatened species is achieved.

# IV. General Permit Effluent Limitations

1. The following numeric effluent limitations apply to:
2. Level II facilities that discharge into water in the state;
3. Level III facilities; and
4. Level IV facilities.

| Parameter | Daily Average  Limitation | Daily Maximum  Limitation | Sample  Type | Monitoring  Frequency 1 |
| --- | --- | --- | --- | --- |
| Flow (Million Gallons per Day, MGD) | Report, MGD | Report, MGD | Estimate | 1/day |
| Total Suspended Solids | N/A | 90 mg/L | Grab | 1/month |
| Inorganic Suspended Solids | N/A | Report, mg/L | Grab | 1/month |
| Total Residual Chlorine | N/A | 0.1 mg/L | Grab | 1/day 2 |
| pH (Standard Units, SU) | 6.0 SU, min | 9.0 SU, max | Grab | 1/week |

1 Monitoring frequency for Level II Facilities shall be once per six months except for flow monitoring which shall be conducted daily.

2 Monitoring for total residual chlorine is required only when the effluent being discharged has been chlorinated.

1. The following effluent limitations apply to Level II, Level III and Level IV facilities discharging to:
2. perennial streams with a headwater flow greater than 2.5 cubic feet per second (cfs), or
3. waterbodies other than perennial streams.

| Parameter | Daily Average  Limitation | Daily Maximum  Limitation | Sample  Type | Monitoring  Frequency 1 |
| --- | --- | --- | --- | --- |
| Dissolved Oxygen | 5.0 mg/L minimum | N/A | Composite 2 | 1/week |
| CBOD5 | N/A | 250 lbs/day and Report, mg/L | Grab | 1/month |
| Ammonia Nitrogen | N/A | 2.0 mg/L | Grab | 1/month |

1 Monitoring frequency for Level II Facilities shall be once per six months.

2 Four grab samples shall be collected and analyzed individually. The results of those analyses shall be averaged for reporting purposes. The first sample shall be taken within 30 minutes of initial discharge. Subsequent samples shall be taken at intervals of no less than two hours and no more than four hours apart with a minimum of four samples or until discharge is discontinued. At least one of the four samples shall be collected between 6:00 a.m. and 9:00 a.m. if discharge occurs within this time period.

1. The following effluent limitations apply to Level II, Level III, and Level IV facilities discharging to perennial streams with a headwater flow less than 2.5 cfs.

| Parameter | Daily Average  Limitation | Daily Maximum  Limitation | Sample  Type | Monitoring  Frequency 1 |
| --- | --- | --- | --- | --- |
| Dissolved Oxygen | 6.0 mg/L minimum | N/A | Composite 2 | 1/week |
| CBOD5 | N/A | 64 lbs/day and Report mg/L | Grab | 1/month |
| Ammonia Nitrogen | N/A | 2.0 mg/L | Grab | 1/month |

1 Monitoring frequency for Level II Facilities shall be once per six months.

2 Four grab samples shall be collected and analyzed individually. The results of those analyses shall be averaged for reporting purposes. The first sample shall be taken within 30 minutes of initial discharge. Subsequent samples shall be taken at intervals of no less than two hours and no more than four hours apart with a minimum of four samples or until discharge is discontinued. At least one of the four samples shall be collected between 6:00 a.m. and 9:00 a.m. if discharge occurs within this time period.

# V. Changes from the Existing Permit.

1. Add a statement under Part I to clarify that all definitions in TWC, § 26.001 and 30 TAC Chapter 305, Consolidated Permits, apply to this permit and are incorporated by reference.
2. Replace the phrase "coverage" with "authorization" throughout the permit for clarity.
3. Replace the name “Gulf of Mexico" with "Gulf of America."
4. Revise the definition for “Best management practices” to include structural controls.
5. Revise the definition of “Coastal zone” for consistency with 31 TAC Part 1, Chapter 27, Coastal Management Program Boundary (CMPB), as follows:

* update CMPB reference from 31 TAC Part 16, Chapter 503, to Part 1, Chapter 27;
* add headings for the inland boundary and the roadway portion of the boundary for consistency with CMPB rules;
* abbreviate State Highway to SH and Interstate Highway to IH throughout the definition for readability; and
* renumber the boundary with the State of Louisiana, seaward boundary, boundary with the Republic of Mexico, and excluded federal lands sections for consistency with CMPB rules.

1. Revise the terms “Edwards Aquifer” and “Edwards Aquifer Recharge Zone” were revised to include a link to the Edwards Aquifer map viewer.
2. Revise the term “Extralabel drug” to “Extralabel drug use” for consistency with 40 CFR Part 451, Concentrated Animal Production Point Source Category.
3. Revise the definition of “Net pen system” for consistency with 40 CFR Part 451, as follows:

A stationary, suspended, or floating system of nets, screens, trays, or cages located in water in the state and within the boundaries of a permit granted by the Texas Parks and Wildlife Department (TPWD). Net pen systems typically are located along a shore or pier or may be anchored and floating offshore. Net pens and submerged cages rely on tides and currents to provide a continual supply of high-quality water to the animals in production.

1. Add a definition for “Submerged cage system” that is consistent with the term as used in 40 CFR Part 451 to clarify the allowable (net-pen) systems that may be used at aquaculture facilities that produce oysters (e.g., oyster mariculture or Level V facilities).

A stationary, suspended, or floating system of cages located in water in the state and within the boundaries of a permit granted by the TPWD. Submerged cages rely on tides and currents to provide a continual supply of high-quality water to the animals in production.

1. Revise the definition for “Wastewater” to include water from the washdown, cleaning, and flushing of sorters and tumblers, types of processing equipment now commonly used in oyster mariculture.

For the purposes of this general permit, wastewater is water that is a result of the following activities:

1. Propagation, rearing, or transportation of aquatic species.
2. Washdown, cleaning, and flushing of fabricated tanks, raceways, ponds, or other containment structures, or process equipment, including sorters and tumblers.
3. Washing, treating, or any other direct contact with aquatic species.
4. Update the term “constituent of concern” to “pollutant of concern” throughout the permit.
5. Revise Part I, Section A.5, to clarify that level V facilities that can be authorized under this general permit include oysters produced in submerged cage systems to clarify the allowable systems that may be used at Level V facilities (i.e., oyster mariculture), as follows:

Aquaculture facilities that produce oysters in a net pen system or submerged cage system, regardless of annual harvest-weight.

1. Revise Part II, Section C.1, and Part III, Section B.11, to remove the requirement to provide notification to or coordinate with the Texas Department of Agriculture (TDA) for consistency with 30 TAC Chapter 7, Memoranda of Understanding, which no longer requires an aquaculture facility to obtain a permit from TDA.
2. Update Part II, Section C.4, 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*.
3. Revise Part II, Section D.4, to clarify that level V facilities include submerged cage systems to clarify the allowable systems that may be used at Level V facilities, as follows:

The permittee is prohibited from feeding oysters in a net pen system or submerged cage system.

1. Revise Part III, Section B.11 to remove the requirement to provide notification to TDA for consistency with 30 TAC Chapter 7, Memoranda of Understanding, which no longer requires an aquaculture facility to obtain a permit from TDA.
2. Revise Part III, Section E.9 to exclude Level V facilities from the prohibition from cleaning system components in or over water in the state, as follows:

The permittee is prohibited from cleaning net pen system components (such as ropes, netting, cages, anchors, etc) in or over water in the state.

Level V facilities are exempt from this prohibition and may clean net pen system and submerged cage system components in or over water in the state when cleaning activities are conducted as follows:

1. for routine washing to remove fouling (i.e., algae and barnacle accumulations);
2. without the use of detergents or other chemicals;
3. in a manner that does not damage or compromise net pen system or submerged cage system components (including any coatings or coverings); and
4. in a manner that does not cause substantial and persistent changes from ambient conditions of turbidity and color.
5. Revise Part III, Section F based on the groundwater protection recommendation memo, as follows:
6. Revise F.3 to clarify loading requirements for nitrogen and phosphorus and establish that land application shall not exceed the available water holding capacity or saturated hydraulic conductivity of the soil.
7. Revise F.7 to clarify cropping requirements and establish record keeping requirements for the addition of fertilizers and crop harvesting and mowing dates.
8. Revise F.8 to include examples of the physical conditions of a land application area that a permittee shall monitor on a weekly basis. The provision was also revised to require implementation of corrective measures within 24 hours.
9. Establish new F.10 requiring signage in English and Spanish at treated effluent storage areas and where there are hose bibs or faucets, and pipe transporting effluent. The signage shall consist of a red slash superimposed over the international symbol for drinking water accompanied by the message “DO NOT DRINK THE WATER.”
10. Establish new F.11 requiring the irrigation system be designed to prevent operation by unauthorized personnel.
11. Establish new F.12 prohibiting irrigation with wastewater when an irrigation area is in use.
12. Revise Part IV, Section B.1 to clarify reporting and signature requirements for annual tests.
13. Update Part IV, Section B.4.a, to add the option for email and clarify the mailing address for submission of written reports.
14. Updated Part IV, Section B.4.b, to clarify discharge monitoring report (DMR) submittal requirements for effluent limitation violations using the NetDMR reporting system or an approved DMR form by obtaining an electronic reporting waiver. The existing subsection 4.b was renumbered as 4.c.
15. Other non-substantive revisions as appropriate.

# VI. Addresses

Comments on this proposed general permit should be sent to:

TCEQ, Office of the Chief Clerk (MC-105)

P.O. Box 13087

Austin, Texas 78711-3087

(512) 239-3300

Questions concerning this draft general permit should be directed to:

TCEQ, Water Quality Division

Wastewater Permitting Section (MC-148)

Shannon Gibson

P.O. Box 13087

Austin, Texas 78711-3087

(512) 239-4284

Supplementary information on this fact sheet is organized as follows:

VII. Legal Basis

VIII. Regulatory Background

IX. Permit Authorization

X. Technology-Based Requirements

XI. Water Quality-Based Requirements

XII. Monitoring and Reporting

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 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. TWC § 26.040 provides the commission with the authority to amend or adopt, as necessary to implement this section, rules adopted under TWC § 26.040, and to authorize waste discharges by general permit. On September 14, 1998, TCEQ received authority from the United States Environmental Protection Agency (EPA) to administer the TPDES program. TCEQ and the EPA have signed a Memorandum of Agreement which authorizes the administration of the National Pollutant Discharge Elimination System (NPDES) program to TCEQ as it applies to the State of Texas.

The Clean Water Act (CWA) §§ 301, 304, and 401 (33 United States Code (USC), §§ 1331, 1314, and 1341) include provisions which state that NPDES permits must include effluent limitations requiring 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, 33 USC, § 1370.

Two types of technology-based effluent limitations must be included in the general permit. With regard to conventional pollutants, i.e., pH, biochemical oxygen demand (BOD), oil and grease, total suspended solids (TSS), and bacteria, CWA § 301(b)(1)(E) requires effluent limitations based on “best conventional pollutant control technology” (BCT). With regard to nonconventional and toxic pollutants, CWA § 301(b)(2)(A), (C), and (D) requires effluent limitations based on “best available technology economically achievable” (BAT), a standard which generally represents 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 best practicable control technology (BPT), a standard applicable to similar discharges before March 31, 1989 under CWA § 301(b)(1)(A).

40 Code of Federal Regulations (CFR) Part 451, Concentrated Aquatic Animal Production (CAAP) Point Source Category provides technology-based limits for discharges from CAAPs that produce 100,000 pounds or more of aquatic animals per year in a flow-through, recirculating, net pen or submerged cage system. There are no federal guidelines for other aquaculture facilities. Until such guidelines are published, however, the CWA § 402(a)(1) requires that appropriate BCT and BAT effluent limitations be included in permitting actions on the basis of best professional judgment (BPJ).

# VIII. Regulatory Background

The regulation of discharges from aquaculture facilities was initially authorized by rule, 30 TAC Chapter 321, Subchapter O (relating to Discharges from Aquaculture Production Facilities) with an effective date of July 28, 1997 and the amendment effective on September 1, 2003. The permit by rule was replaced by TPDES General Permit TXG130000 in April 2006 and 30 TAC Chapter 321, Subchapter O was repealed in September 2007. The commission was given authority to issue general permits by House Bill (HB) 1542, 75th Texas Legislature (1997). Further clarification of general permit authority was provided in subsequent legislation, HB 1283, 76th Texas Legislature (1999). As a result of this authority, and in accordance with a memorandum of agreement between the EPA and TCEQ relating directly to the TPDES permit program, the commission is seeking to reissue this general permit.

# IX. Permit Authorization

This general permit authorizes discharges into or adjacent to water in the state by aquaculture facilities, and certain related activities. Permit eligibility is divided into five levels of authorization based on activity and size, with each level having specific regulatory requirements.

The general permit specifies which facilities are eligible for authorization under the general permit and which must be authorized by individual permit. All commercial shrimp production facilities located within the defined coastal zone are required to obtain an individual TPDES permit as defined in the TWC § 26.0345. However, shrimp research facilities located in the coastal zone that are below the thresholds defined in the general permit are eligible for authorization under this general permit. The information developed by research facilities typically provides indirect support to commercial activities and may be located in conjunction with a commercial facility. In such situations, the facility will be eligible for authorization under the general permit if the research is conducted by a separate facility. However, commercial facilities with a research arm do not meet the definition of a research facility.

Facilities that do not discharge wastewater into or adjacent to water in the state are not required to obtain authorization under this general permit or an individual permit. This includes facilities that dispose of wastewater by recycling, pumping and hauling, discharge to a POTW, underground injection in accordance with 30 TAC Chapter 331, or discharge to above ground storage tanks.

To obtain authorization to discharge under the proposed general permit, an applicant must meet the following guidelines:

1. Operations that meet the descriptions and criteria that qualify for Level I are not required to submit an NOI in order to be authorized under this general permit. Qualifying operations may, however, complete Attachment 1, Notice of Water Quality Authorization, and use this notice as necessary to demonstrate authorization under the general permit. Level I facilities must comply with applicable requirements of the general permit.
2. Applicants seeking authorization to discharge under Level II, III, IV, or IV of this general permit must submit a completed NOI on a form approved by the executive director. The NOI shall include at a minimum the legal name and address of the owner and operator, the facility name and address, specific description of its location, (including the street address, if applicable, and county), the type of facility and discharge, the name of the receiving water, and the estimated volume of the discharge (expressed as gallons per day).
3. Submission of an NOI is an acknowledgment that the conditions of this general permit are applicable to the proposed discharge, and that the applicant agrees to comply with the conditions of this general permit. The NOI must be submitted to the address indicated on the NOI form. Authorization under the terms and conditions of this general permit begins when the applicant is issued an authorization number by certificate. The executive director shall either confirm authorization by providing a notification and an authorization number to the applicant or notify the applicant that authorization under the general permit is denied.
4. Authorization under the general permit is not transferable. If the owner or operator of the regulated entity changes, the present owner and operator must submit a Notice of Termination (NOT) and the new owner and operator must submit a NOI. The NOT and NOI must be submitted concurrently no fewer than 10 days before the transfer occurs. Any change in a permittee’s Charter Number, as registered with the Texas Secretary of State, is considered a change in ownership of the company and would require the new owner to apply for permit authorization as stated above. If the NOT and NOI are submitted as required under this provision, there will be no lapse in authorization for the facility.
5. If the owner or operator becomes aware that it failed to submit any relevant facts, or submitted incorrect information in a NOI, the correct information must be provided to the executive director in a NOC within 14 days after discovery. If relevant information provided in the NOI changes (for example, address, phone number, authorization Level, discharge days, production weight, aquaculture species produced) a NOC must be submitted within 14 days of the change.
6. Operators of aquaculture facilities that intend or plan to expand facilities, production, number of discharge days, or other factors that would change the facility level as described in Part II.A of this permit, must comply with one of the following prior to initiating these changes:
7. Level I facilities must submit an NOI and receive authorization;
8. Level II, Level III, Level IV, and Level V facilities must submit a NOC; or
9. Obtain authorization under a separate individual or general permit.
10. All reports, NOIs, NOTs, NOCs and other information requested by the executive director shall meet the requirements of 30 TAC §305.44(a) (relating to Signatories to Applications).
11. For discharges located on or within ten stream miles upstream of the Edwards Aquifer Recharge Zone, applicants must also submit a copy of the NOI, to the appropriate TCEQ regional office.

Counties: Bexar, Comal, Hays, Kinney, Medina, Travis, Uvalde, and Williamson

Contact: TCEQ Edwards Aquifer Protection Program Manager

Austin Regional Office

P.O. Box 13087

Austin, TX 78711-3087

512-339-2929

# X. Technology -Based Requirements

The effluent limitations and conditions of the proposed general permit were originally developed to comply with the technology-based standards of the CWA. 40 CFR Part 451, Concentrated Aquatic Animal Production (CAAP) Point Source Category, Subpart A, Flow-Through and Recirculating Systems Subcategory provides technology-based effluent limitations for discharges from CAAPs that produce 100,000 pounds or more of aquatic animals per year in a flow-through, recirculating, or net pen system (including cages). Technology-based requirements for flow-through, recirculating, and net pen systems (including cages) are included in the general permit based on BPT (BAT/BCT defer to requirements representing the applicable BPT). These requirements include:

1. Reporting requirements for failure or damage to the containment system and spills of pesticides, drugs, and feed.
2. Development of a Best Management Practice (BMP) Plan for solids control, material storage, structural maintenance, record-keeping, and training.

Permittees are prohibited from feeding oysters in a net pen system (including submerged cages). This prohibition, which is more stringent than 40 CFR Part 451, is to minimize the discharge of total suspended solids and oxygen demanding constituents. There are no applicable federal guidelines identifying the BPT, BCT, and BAT standards for other types of aquaculture facilities, therefore additional technology-based effluent limitations are based on BPJ. The parameters selected for BCT/BAT limits are the primary pollutants of concern for all discharges authorized in the general permit.

Activities related to the harvest of aquatic species in production units, such as seining and dewatering, have a potential to suspend pond bottom sludges that are subsequently discharged with pond effluent. An effluent limitation of 90 mg/L for TSS was originally established for BCT based on BPJ. This limit is still consistent with the limitation for stabilization ponds required in 30 TAC **§** 309.4.The suspension of inorganic suspended solids can lead to turbidity and may also contribute to the deposition of solids and filling of receiving waters, therefore a report requirement was included in the general permit. An effluent limitation for pH of 6.0 to 9.0 standard units is also included which is a typical requirement for all TPDES permits to prevent acidic or alkaline discharges.

The existing technology-based effluent limitations TSS, total residual chlorine, and pH, and monitoring requirements for flow and inorganic suspended solids are still protective have been carried forward in the draft general permit.

# XI. Water Quality-Based Requirements

Water quality-based effluent limitations have been carried forward in the proposed permit for dissolved oxygen (DO), carbonaceous biochemical oxygen demand 5-day (CBOD5) and ammonia nitrogen. Modeling was conducted to determine effluent limitations to ensure the DO criteria delineated in 30 TAC Chapter 307, *Texas Surface Water Quality Standards*, will be maintained with consideration for the various types of waters that may receive the authorized discharges. The most stringent DO standard of 5.0 mg/L for perennial streams was utilized for modeling purposes. Modeling results determined that an effluent set of 30 mg/L CBOD5, 2.0 mg/L ammonia nitrogen, and 5.0 mg/L DO is protective of discharges into all water bodies except perennial streams with a headwater flow less than 2.5 cubic feet per second (cfs)(Appendix B). For discharges to perennial streams with headwater flows less than 2.5 cfs, modeling was conducted based on a headwater flow of 0.1 cfs (Appendix C). Effluent limitations were then converted to mass limitations utilizing the corresponding effluent flow utilized for modeling. Appendix A of this fact sheet includes the CBOD5, ammonia nitrogen, and DO effluent limitations that are needed to maintain the required DO for different types of water bodies at various flows.

Aquaculture production facilities may use chlorine for periodic small-scale disinfection of raceways, fabricated tanks and equipment. Discharges must not exceed a chlorine concentration of 0.1 mg/L as a grab sample based on the protection of aquatic life. The total residual chlorine limitation will ensure that the effluent is not acutely toxic to aquatic life at the point of discharge.

Part II, Sections B.2(a) and (b) address discharges prohibited by the Watershed Protection rule (30 TAC Chapter 311) and the Edwards Aquifer and Contributing Zone rule (30 TAC Chapter 213), and B.2(c) addresses prohibitions related to fish, shellfish, and aquatic plants. Part II, Section B3 disallows new sources or new dischargers of constituents of concern to impaired waters (303(d) listed water bodies) unless otherwise allowable under 30 TAC Chapter 305 and applicable law. Part II, Section B.4 addresses discharges to impaired water bodies where there is a Total Maximum Daily Load (TMDL) Implementation Plan (IP). The executive director may require an applicant to apply for an individual TPDES permit based on conditions of an approved TMDL and/or TMDL IP. Part II, Section B.8 states that the executive director may require an application for an individual permit to authorize a discharge from any activity that will not maintain existing uses of the receiving waters. Part II, Section B.10 prohibits discharges that would adversely affect a listed endangered or threatened species or its critical habitat.

In accordance with 30 TAC Chapter 307.5, effective as state rule September 7, 2022, and TCEQ Procedures to Implement the TSWQS (June 2010), it has been preliminarily determined that if permit requirements are properly implemented, no significant degradation is expected and existing uses will be maintained and protected.

# XII. Monitoring and Reporting

Monitoring is required by 40 CFR § 122.44(i) for each pollutant limited in a permit to ensure compliance with permit limits. The general permit has the following criteria established for monitoring and reporting based on the requirements of 30 TAC Chapter 319.

1. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
2. The sampling point to determine compliance with the monitoring conditions of this general permit must be downstream of any waste management unit used and prior to discharge into water in the state.
3. All samples must be collected according to the latest edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and published jointly by the American Public Health Association, the American Waterworks Association, and the Water Environmental Federation), or the Environmental Protection Agency's, "Methods for Chemical Analysis of Water and Wastes" (1983), or the Environmental Protection Agency's, "Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents" (1973).
4. Sample containers, holding times, preservation methods, and the analytical methods for the analyses of effluent samples shall meet the requirements in 40 CFR Part 136, or in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater."
5. The permittee shall ensure that properly trained and authorized personnel monitor and sample the discharge.
6. All laboratory tests required to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.
7. Monitoring results shall be provided at the intervals specified in the permit on an approved Discharge Monitoring Report form (DMR) (EPA Form 3320-1) or online using the NetDMR reporting system available through TCEQ’s website. Effluent sampling shall be conducted in accordance with the monitoring frequencies specified in the general permit. DMRs shall be submitted on a monthly basis to TCEQ's Enforcement Division (MC 224) or online using the NetDMR reporting system available through TCEQ’s website. The DMR for any given calendar month shall be due by the 20th day of the following calendar month for each discharge that is described by this permit regardless of whether there is a discharge during the reporting month.
8. If the permittee monitors any pollutant in a discharge more frequently than required by the permit using approved analytical methods as specified in this permit, all results of such monitoring shall be included in the calculation and recording of the values on the DMR. Increased frequency of sampling shall be indicated on the DMR.
9. Records of monitoring activities shall include:
10. the date, time and place of sample or measurement;
11. the identity of the individual who collected the sample or made the measurement;
12. the date of analysis;
13. the identity of the individual and laboratory who performed the analysis;
14. the technique or method of analysis; and
15. the results of the analysis or measurement.
16. The records of all monitoring activities shall be maintained at the facility and shall be readily available for inspection by authorized representatives of TCEQ for a minimum period of five years.
17. According to 30 TAC §305.125(9) any noncompliance which may endanger human health or safety, or the environment, shall be reported by the permittee to TCEQ. Report of such information shall be provided orally, by electronic mail, or by electronic facsimile transmission to the appropriate TCEQ regional office within 24 hours of becoming aware of the noncompliance. A written report shall be provided by the permittee to the appropriate TCEQ regional office and to TCEQ’s Enforcement Division (MC-224) within five working days of becoming aware of the noncompliance. The written report shall be submitted to P.O. Box 13087, Austin, Texas 78711-3087 or by FAX. The written report shall contain:
18. a description of the noncompliance and its cause;
19. the potential danger to human health or safety, or the environment;
20. the period of noncompliance, including exact dates and times;
21. if the noncompliance has not been corrected, the anticipated time it is expected to continue;
22. the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects; and
23. the quality assurance/quality control records.

# XIII. Procedures for Final Decision

The memorandum of agreement between the EPA and TCEQ provides that EPA has no more than 90 days to comment, object, or make recommendations to the draft general permit before it 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 at least one newspaper of statewide or regional circulation. Mailed notice must also be provided to the following:

1. the county judge of the county or counties in which the discharges under the general permit could be located;
2. if applicable, state and federal agencies for which notice is required in 40 CFR, §124.10(c);
3. persons on a relevant mailing list kept under 30 TAC §39.407, relating to Mailing Lists; and
4. any other person the executive director or chief clerk may elect to include.

After notice of the general permit is published in the *Texas Register* and the newspaper, the public will have 30 days to provide public comment on the proposed permit.

Any person, agency, or association may make a request for a public comment hearing on the proposed general permit to the executive director of TCEQ before the end of the public comment period. A public comment hearing 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 comment hearing is intended for the taking of public comment and is not a contested case proceeding under the Texas Administrative Procedure Act. The executive director may call and conduct public meetings in response to public comment.

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 significant public comments on the draft general permit raised during the public comment period. The executive director shall make the response available to the public. 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 10 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.

1. TPDES Permits

TPDES General Permit for Concentrated Aquatic Animal Production Facilities and Aquatic Animal Production Facilities (TXG130000) effective April 18, 2021.

1. 40 CFR Citations

40 CFR § 122.24

40 CFR Part 122, Appendix C

40 CFR Part 124

40 CFR Part 136

40 CFR Part 451

1. TCEQ Rules

30 TAC Chapters 7, 39, 205, 213, 305, 307, 309, 319, 321, 331, and 335.

1. Letters/Memoranda/Records of Communication

Interoffice Memorandum dated November 22, 2024, from Peter Schaefer (Standards Implementation Team Leader).

Interoffice Memorandum dated November 20, 2024, from James Michalk (Water Quality Assessment Team).

Interoffice Memorandum dated November 7, 2024, from April Hoh, P.G., and Alan Barraza (Water Quality Assessment Team).

1. Miscellaneous

Procedures to Implement the Texas Surface Water Quality Standards (RG-194), June 2010.

Exec. Order No. 14,172, 90 Fed. Reg. 8629 (Jan. 31, 2025); U.S. Dept. of the Interior, Secretary Order No. 3423 (Feb. 7, 2025).

Appendix A

Modeling of Potential Discharges into Various Receiving Water Types.

Various scenarios have been modeled to demonstrate the minimum level of treatment required to maintain DO criteria. Discharges of 0.1 million gallons per day (MGD), 1.0 MGD, and 5.0 MGD have been evaluated for impacts into four types of receiving waters. The receiving waters analyzed were intermittent streams (2.0 mg/L DO criterion), perennial streams with 0.1 cubic feet per second (cfs) headwater (5.0 mg/L DO criterion), tidal rivers (4.0 mg/L DO criterion), and open shallow bays (4.0 mg/L DO criterion). Standard default values for hydraulic coefficients, kinetics, and temperature were used in all models. The results are as follows:

Intermittent Stream (2.0 mg/L DO criterion)

|  |  |  |
| --- | --- | --- |
| Discharge (MGD) | Treatment Levels  CBOD5/NH3-N/DO (mg/L) | Minimum Dissolved Oxygen (mg/L) |
| 0.1 | 30/3/4 | 4.3 |
| 1.0 | 30/3/4 | 2.3 |
| 5.0 | 30/3/4 | 1.8 |

Perennial Stream (5.0 mg/L DO criterion)

|  |  |  |
| --- | --- | --- |
| Discharge (MGD) | Treatment Levels  CBOD5/NH3-N/DO (mg/L) | Minimum Dissolved Oxygen (mg/L) |
| 0.1 | 30/3/4 | 4.8 |
| 1.0 | 7/2/6 | 4.9 |
| 5.0 | 5/2/6 | 4.8 |

Tidal River (4.0 mg/L DO criterion)

|  |  |  |
| --- | --- | --- |
| Discharge (MGD) | Treatment Levels  CBOD5/NH3-N/DO (mg/L) | Minimum Dissolved Oxygen (mg/L) |
| 0.1 | 30/3/4 | 4.5 |
| 1.0 | 30/3/4 | 4.5 |
| 5.0 | 30/3/4 | 4.2 |

Open Bay (4.0 mg/L DO criterion)

|  |  |  |
| --- | --- | --- |
| Discharge (MGD) | Treatment Levels  CBOD5/NH3-N/DO (mg/L) | Minimum Dissolved Oxygen (mg/L) |
| 0.1 | 30/3/4 | 5.2 |
| 1.0 | 30/3/4 | 4.6 |
| 5.0 | 10/3/4 | 4.2 |

Appendix B

Determination of CBOD5 Mass Limitations for Discharges to Perennial Streams with a

Headwater Flow of Greater than 2.5 Cubic Feet Per Second (cfs).

The following modeling runs have been performed using various discharge volumes to determine the level of treatment necessary to maintain DO criteria for perennial streams with a high aquatic life use (5.0 mg/L DO criterion). A headwater flow of 2.5 cfs was utilized.

Perennial Stream (5.0 mg/L DO criterion)

| Discharge (MGD) | Treatment Levels  CBOD5/NH3-N/DO (mg/L) | Minimum Dissolved  Oxygen (mg/L) |
| --- | --- | --- |
| 0.59 | 30/5/4 | 4.8 |
| 0.68 | 30/4/4 | 4.8 |
| 0.70 | 30/4/5 | 4.8 |
| 0.79 | 30/3/4 | 4.8 |
| **1.00** | **30/2/5** | **4.8** |
| 1.05 | 30/2/6 | 4.8 |
| 1.08 | 20/3/4 | 4.8 |
| 1.17 | 20/3/5 | 4.8 |
| 1.56 | 20/2/5 | 4.8 |
| 1.69 | 20/2/6 | 4.8 |
| 1.96 | 10/3/5 | 4.8 |
| 2.25 | 10/3/6 | 4.8 |
| 4.02 | 10/2/6 | 4.8 |

The effluent ratio of 30 CBOD5/ 2 NH3-N/and 5.0 DO will adequately maintain the dissolved oxygen (DO) criteria for perennial streams with a high aquatic life use (5.0 mg/L DO criterion). The corresponding discharge flow volume of 1.0 million gallons per day (MGD) was utilized to calculate a mass loading limitation for CBOD5. The conversion factor for concentration to mass based limitations is 8.345.

Daily Maximum CBOD5: 1.0 MGD x 8.345 x 30 mg/L = 250 lbs/day

Appendix C

Determination of CBOD5 Mass Limitations for Discharges to Perennial Streams with a

Headwater Flow of Less than 2.5 Cubic Feet Per Second (cfs).

The following modeling runs have been performed using various discharge volumes to determine the level of treatment necessary to maintain DO criteria for perennial streams with a high aquatic life use (5.0 mg/L DO criterion). A headwater flow of 0.1 cfs was utilized.

| **Water Body** | **Discharge (MGD)** | **Treatment Levels**  **CBOD5/NH3-N/DO (mg/L)** | **Minimum Dissolved**  **Oxygen (mg/L)** |
| --- | --- | --- | --- |
| Perennial Stream  (5.0 mg/L DO criterion) | 0.11 | 30/3/4 | 4.8 |
| 0.13 | 20/3/4 | 4.8 |
| 0.17 | 10/3/4 | 4.8 |
| 0.18 | 30/2/6 | 4.8 |
| 0.20 | 20/3/5 | 4.8 |
| 0.22 | 20/3/6 | 4.8 |
| 0.28 | 20/2/5 | 4.8 |
| 0.32 | 20/2/6 | 4.8 |
| 0.36 | 10/3/5 | 4.8 |
| 0.43 | 10/3/6 | 4.8 |
| **0.77** | **10/2/6** | **4.8** |
| 0.86 | 7/2/5 | 4.8 |
| 1.81 | 7/2/6 | 4.8 |

The effluent ratio of 10 CBOD5/ 2 NH3-N/and 6.0 DO will adequately maintain the dissolved oxygen (DO) criteria for perennial streams with a high aquatic life use (5.0 mg/L DO criterion). The corresponding discharge flow volume of 0.77 million gallons per day (MGD) was utilized to calculate a mass loading limitation for CBOD5. The conversion factor for concentration to mass based limitations is 8.345.

Daily Maximum CBOD5: 0.77 MGD x 8.345 x 10 mg/L = 64 lbs/day