

Texas Commission on Environmental Quality

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



TPDES GENERAL PERMIT TO DISCHARGE WASTEWATER ASSOCIATED WITH OIL AND GAS EXTRACTION ACTIVITIES

under provisions of Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

This TPDES general permit supersedes and replaces
NPDES General Permit No. TXG260000 effective on February 8, 2012 and
NPDES General Permit No. TXG330000 effective on September 11, 2014.

Wastewater associated with oil and gas extraction activities located in the State of Texas, may be discharged into water in the state, including receiving waters with exceptional, high, intermediate, limited or minimal aquatic life use as designated in the Texas Surface Water Quality Standards, only according to effluent limitations, monitoring requirements and other conditions set forth in this TPDES general permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ or Commission), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this TPDES general permit does not grant the permittee the right to use private or public property for the conveyance of wastewater along the discharge route. This includes, but is not limited to, property belonging to any individual, partnership, corporation or other entity. This TPDES general permit neither authorizes any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This TPDES general permit and the authorization contained herein shall expire at midnight five years from the effective date.

EFFECTIVE DATE: *January 17, 2024*

ISSUED DATE: *January 17, 2024*



For the Commission

TPDES GENERAL PERMIT NUMBER TXG310000 RELATING TO
DISCHARGES OF WASTEWATER ASSOCIATED WITH OIL AND GAS
EXTRACTION ACTIVITIES

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Part I. Definitions

The following words and terms, for the purposes of this general permit, shall have the following meanings.

Areas of biological concern – A portion of the territorial seas identified by the U.S. Environmental Protection Agency (EPA), in consultation with the U.S. Department of Interior, as containing potentially productive or unique biological communities or as being potentially sensitive to discharges associated with oil and gas activities.

Bacteria concentration (Enterococci, or Fecal Coliform) - Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method.

Ballast/bilge water – Seawater added or removed to maintain proper draft (ballast water) or water from a variety of sources that accumulates in the lowest part of the vessel/facility (bilge water).

Blow-out preventer control fluid – Fluid used to actuate the hydraulic equipment on the blow-out preventer. This includes fluid from the subsea wireline “grease-head.”

Boiler blowdown – Discharges from boilers necessary to minimize solids build-up in the boilers, including vents from boilers and other heating systems.

Coastal facility – Any oil and gas extraction operation located in or on a water in the State of Texas landward of the inner boundary of the territorial seas; or located landward of the inner boundary of the territorial seas and bounded on the inland side by latitude and longitude coordinates established in 40 Code of Federal Regulation (CFR) §435.40(b).

Composite Sample – A composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC §319.9(c).

Contaminated miscellaneous discharges – Diatomaceous earth filter media; blowout preventer control fluid; ballast water; bilge water; freshwater discharge; sea water discharge; desalination unit discharge; boiler blowdown; source water and sand; excess cement slurry; and unused cement slurry which receive treatment via the use of treatment chemicals or come into contact with oil or petroleum waste.

Contaminated stormwater – Stormwater discharges from oil and gas extraction facilities meeting the conditions established in 40 CFR § 122.26(b)(14)(iii) (i.e., stormwater contaminated by contact with or that has come into contact with any overburden, raw material, intermediate products, finished products, byproducts or waste located on the site of operations).

Daily average flow - The arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.

Daily average limitations - The arithmetic average of results of analyses for a parameter from a minimum of four samples of the discharges that occur in a single calendar month. When results of analyses of four samples are not available in a single calendar month, the arithmetic average of the most recent results, not to exceed four, must be reported as the daily average.

Daily maximum flow - The highest total flow for any 24-hour period in a calendar month.

Daily maximum limitations - The maximum value measured on a single day within a single calendar month as established by the unit of measurement. pH daily maximum limitations are established as a minimum and maximum range.

Deck drainage – Any waste resulting from deck washings, spillage, rainwater, or runoff from gutters and drains including drip pans and work areas within facilities subject to 40 CFR Part 435 (Oil and Gas Extraction Point Source Category).

Desalination unit discharge – Wastewater associated with the process of creating freshwater from seawater.

Development facility – Any fixed or mobile structure that is engaged in the drilling of productive wells.

Dewatering effluent – Wastewater from drilling fluids and drill cuttings dewatering activities (including but not limited to reserve pits or other tanks or vessels, and chemical or mechanical treatment occurring during the drilling solids separation/recycle/disposal process).

Diatomaceous earth filter media – Filter media used to filter seawater or other authorized completion fluids and subsequently washed from the filter.

Discharge - Deposit, conduct, drain, emit, throw, run, allow to seep, or otherwise release or dispose of, or to allow, permit, or suffer any of these acts or omissions.

Domestic waste – The materials discharged from sinks, showers, laundries, safety showers, eye-wash stations, hand-wash stations, fish cleaning stations, or galleys located within facilities subject to 40 CFR Part 435 (Oil and Gas Extraction Point Source Category).

Drill cuttings – The particles generated by drilling into subsurface geologic formations and carried out from the wellbore with the drilling fluid. Examples of drill cuttings include small pieces of rock varying in size and texture from fine silt to gravel. Drill cuttings are generally generated from solids control equipment and settle out and accumulate in quiescent areas in the solids control equipment or other equipment processing drilling fluid (i.e., accumulated solids). Both wet and dry drill cuttings are included in this definition.

Drilling fluid – The circulating fluid (mud) used in the rotary drilling of wells to clean and condition the hole and to counterbalance formation pressure. Both water-based drilling fluids and non-aqueous drilling fluids are included in this definition.

Excess cement slurry – The excess mixed cement, including additives and wastes from equipment washdown, after a cementing operation.

Exploratory facility – Any fixed or mobile structure subject to 40 CFR Part 435 that is engaged in the drilling of wells to determine the nature of potential hydrocarbon reservoirs.

Facility - Any National Pollutant Discharge Elimination System (NPDES) “point source” (as defined in 40 CFR § 122.2) or any other facility or activity that is subject to regulation under the Texas Pollutant Discharge Elimination System (TPDES) program. For the purposes of this general

permit, a facility includes a Development Facility, an Exploratory Facility, or a Production Facility.

Formation test fluids - The discharge that would occur if hydrocarbons are located during exploratory drilling and tested for formation pressure and content.

Freshwater discharge - Freshwater which is discharged. Included are (1) discharges of excess freshwater that permit the continuous operation of fire control and utility lift pumps, (2) excess freshwater from pressure maintenance and secondary recovery projects, and (3) water released during training and testing of personnel in fire protection, potable water, and off-specification potable water.

Garbage - All kinds of victual, domestic, and operational waste, excluding fresh fish and parts thereof, generated during the normal operation of a coastal oil and gas facility and liable to be disposed of continuously or periodically, except dishwater, graywater, and those substances that are defined or listed in other Annexes to MARPOL 73/78.

Gas well - Any well which produces natural gas in a ratio to the petroleum liquids produced greater than 15,000 cubic feet of gas per one barrel (42 gallons) of petroleum liquids.

General permit - A permit issued under the provisions of Title 30 Texas Administrative Code (TAC) Chapter 205 authorizing the discharge of waste into water in the state for one or more categories of waste discharge within a geographical area of the state or the entire state, as provided by Texas Water Code (TWC), § 26.040.

Grab sample - An individual sample collected in less than 15 minutes.

Hydrate control fluids - Fluids used to prevent, retard, or mitigate the formation of hydrates in, and on, drilling equipment, process equipment, and piping.

Hydrostatic test water - Water resulting from testing the hydraulic and structural integrity of a vessel by either introducing water into the vessel or submerging the empty vessel in water.

Land application - The spraying or spreading of wastewater onto the land surface or the incorporation of wastewater into the soil in a way that causes no nuisance conditions and that uses the wastewater to either condition the soil or fertilize crops or vegetation grown in the soil, and does not result in discharge to surface water in the state.

Live bottom areas – Those areas which contain biological assemblages consisting of such sessile invertebrates as sea fans, sea whips, hydroids, anemones, ascidians sponges, bryozoans, seagrasses, or corals living upon, and attached to, naturally occurring hard or rocky formations with fishes and other fauna.

M9IM – A coastal facility or territorial seas facility continuously manned by nine (9) or fewer persons or only intermittently manned by any number of persons.

M10 – A coastal facility or territorial seas facility continuously manned by ten (10) or more persons.

Muds, cuttings, and cement at the seafloor – Discharges that occur at the seafloor prior to installation of the marine riser and during marine riser disconnect, well abandonment, and plugging operations.

Municipal separate storm sewer system (MS4) - A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (a) owned or operated by the United States, a state, city, town, borough, county, district, association, or other public body (created by, or pursuant to, state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under § 208 of the Clean Water Act (CWA);
- (b) designed or used for collecting or conveying stormwater;
- (c) which is not a combined sewer;
- (d) which is not part of a publicly owned treatment works (POTW) as defined at 40 CFR § 122.2; and
- (e) which does not include very discrete systems such as those serving individual buildings. *See also* 40 CFR § 122.26(b)(4), (7), and (16).

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

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

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

Operator - A person responsible for the overall operation of a facility.

Owner - A person who owns a facility or part of a facility.

Packer fluid - Low solids fluids between the packer, production string and well casing. They are considered to be workover fluids.

Permittee - Any person issued an individual permit, order, or authorized by a general permit.

Produced sand - The slurried particles used in hydraulic fracturing, the accumulated formation sands, and scales particles generated during production. Produced sand also includes desander discharge from the produced wastewater stream, and blowdown of the water phase from the produced wastewater treating system.

Produced wastewater - The water (brine) brought up from the hydrocarbon-bearing strata during the extraction of oil and gas, which can include formation water, injection water, and any chemicals added downhole or during the oil/water separation process.

Production facility - Any fixed or mobile structure subject to 40 CFR Part 435 that is either engaged in well completion or used for active recovery of hydrocarbons from producing formations. This includes facilities that are engaged in hydrocarbon fluids separation even if located separately from wellheads.

Sanitary waste - Human body waste discharged from toilets and urinals located within facilities subject to 40 CFR Part 435.

Seawater discharge - Seawater which is returned to the sea. Included are (1) discharges of excess seawater necessary for the continuous operation of fire control and utility lift pumps, (2) excess seawater from pressure maintenance and secondary recovery projects, (3) water released during the training and testing of personnel in fire protection, and (4) once through non-contact cooling water.

Sheen - A silvery or metallic sheen, gloss, or increased reflectivity, visual color, or iridescence on the water surface.

Site - The land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

Solids control equipment - Shale shakers, centrifuges, mud cleaners, and other equipment used to separate drill cuttings and/or stock barite solids from drilling fluid recovered from the wellbore.

Source water and sand - Water from non-hydrocarbon bearing formations for the purpose of pressure maintenance or secondary recovery including entrained solids.

Stripper well facility - An oil and gas extraction operation located on land (not in or on water) east of the 98th meridian which only includes wells that produce 10 barrels per calendar day or less of crude oil and that are operating both at the maximum feasible rate of production and in accordance with recognized conservation practices. A stripper well facility does not include gas wells or wells injecting water for disposal or for enhanced recovery of oil or gas.

Territorial seas facility - An oil and gas extraction operation located in waters that are seaward of the inner boundary of the territorial seas and extending seaward a distance of three statute miles from the coastline. Territorial seas are defined in Section 502(8) of the Clean Water Act (CWA).

Texas Pollutant Discharge Elimination System (TPDES) - The Texas program for issuing, amending, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under the CWA §§ 307, 402, 318, and 405, Chapter 26 of the Texas Water Code (TWC), and Title 30 of the Texas Administrative Code (TAC).

Treatment chemicals - Biocides, corrosion inhibitors, or other chemicals which are used to treat wastewater. Non-toxic scale inhibitors, dyes, and chlorine/bromine used for disinfection or biological growth control are not considered treatment chemicals for the purpose of this TPDES general permit.

Uncontaminated miscellaneous discharges - Diatomaceous earth filter media; blowout preventer control fluid; ballast water; bilge water; muds, cuttings, and cement at the sea floor; freshwater discharge; sea water discharge; desalination unit discharge; boiler blowdown; source water and sand; excess cement slurry; and unused cement slurry which do not receive treatment via the use of treatment chemicals, or come into contact with oil or petroleum waste.

Water in the State - Groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or nonnavigable, and including the beds and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the state or inside the jurisdiction of the state. TWC §26.01(5).

Well completion fluids - Salt solutions, weighted brines, polymers, and various additives used to prevent damage to the well bore during operations which prepare the drilled well for hydrocarbon production. These fluids move into the formation and may return to the surface as a slug with the produced wastewater. Drilling muds remaining in the wellbore during logging, casing, and cementing operations or during temporary abandonment of the well are not considered well completion fluids and are regulated by drilling fluids requirements.

Well treatment fluids - Any fluid used to restore or improve productivity by chemically or physically altering hydrocarbon-bearing strata after a well has been drilled. These fluids move into the formation and may return to the surface as a slug with the produced wastewater.

Workover fluids - Salt solutions, weighted brines, polymers, or other specialty additives used in a producing well to allow for maintenance, repair, or abandonment procedures. High solids drilling fluids used during workover operations are not considered workover fluids by definition and therefore discharge is prohibited. Packer fluids, low solids fluids between the packer, production string, and well casing, are considered to be workover fluids and must meet only the effluent requirements imposed on workover fluids.

Part II. Permit Applicability and Authorization

Section A. Discharges Authorized

This TPDES general permit authorizes the discharge of wastewater associated with oil and gas extraction activities into water in the state from:

1. Onshore Stripper Well Facilities Located East of the 98th Meridian (hereafter referred to as Stripper Well Facilities);
2. Coastal Facilities; and
3. Territorial Seas Facilities.

Section B. Limitations on Authorization

1. Additional authorization for Stripper Well Facilities may be required for discharges into water in the state located on or within ten stream miles upstream of the Edwards Aquifer recharge zone, as defined in 30 TAC Chapter 213, *Edwards Aquifer*. Also, see Part II.C.3 for discharges regulated under 30 TAC Chapter 213.
2. Discharges are not authorized by this TPDES general permit where prohibited by:
 - a. 30 TAC Chapter 311, *Watershed Protection*;
 - b. 30 TAC Chapter 213, *Edwards Aquifer*, or
 - c. any other applicable rules or laws.
3. This TPDES general permit does not authorize disposal of wastewater discharges by land application or evaporation from oil and gas extraction activities.
4. The Executive Director will deny an application for authorization under this TPDES general permit and may require that the applicant apply for an individual TPDES permit if the Executive Director determines that discharge activities will not maintain existing uses of receiving waters and an individual permit would require additional controls to maintain existing uses of the receiving water. Additionally, the Executive Director may cancel, revoke, or suspend authorization for discharge under this TPDES general permit based on a finding of historical and significant noncompliance with the provisions of this TPDES general permit. The Executive Director shall deny or suspend a facility's

- authorization for discharge under this TPDES 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 TWC § 26.040(h). Denial of authorization for discharge under this TPDES general permit will be done according to Commission rules in 30 TAC Chapter 205, *General Permits for Waste Discharges*.
5. This TPDES general permit does not limit the authority of a home-rule municipality as established in Texas statute.
 6. New sources or new discharges [as defined in 40 CFR §122.2, 40 CFR §435.11(w), and 40 CFR §435.41(x)] of the constituent(s) of concern to impaired waters are not authorized by this TPDES general permit, unless otherwise allowable under 30 TAC Chapter 305 and applicable state law. Impaired waters are 1) those that do not meet applicable water quality standard(s) and are listed as category 4 or 5 in the current version of the *Texas Integrated Report of Surface Water Quality* and 2) waterbodies listed on the CWA § 303(d) list. Constituents of concern are those for which the water body is listed as impaired. In relation to this TPDES general permit limitation, monitoring and reporting requirements are established for total mercury for produced wastewater discharges to the Gulf of Mexico.
 7. Discharges of the constituent(s) of concern to impaired water bodies where there is a total maximum daily load (TMDL) implementation plan are not eligible for authorization under this TPDES general permit unless the discharge is consistent with the approved TMDL and the implementation plan. The Executive Director may amend this TPDES general permit or develop a separate TPDES general permit for discharges to these water bodies. For discharges not eligible for authorization under this TPDES general permit, the discharger must apply for, and receive, an individual TPDES permit or be authorized under another applicable TPDES general permit prior to discharging.
 8. Discharges that would adversely affect a listed endangered or threatened species or its critical habitat are not authorized by this TPDES general 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.

9. This TPDES general permit does not authorize discharges from onshore facilities defined in 40 CFR Part 435, Subpart C (Onshore Subcategory) and 40 CFR Part 435, Subpart E (Agricultural and Wildlife Water Use Subcategory).
10. This TPDES general permit does not authorize discharges from facilities located greater than three statute miles from the coastline in an area of the Gulf of Mexico that is commonly referred to as the Outer Continental Shelf.
11. This TPDES general permit does not authorize discharges from facilities located west of the 98th meridian.
12. This TPDES general permit does not authorize discharges from stripper well facilities to tidally influenced or marine water bodies.
13. This TPDES general permit does not authorize the discharge of hydrostatic test water. Oil and gas extraction facilities seeking to discharge hydrostatic test water into surface water in the state have the option of obtaining coverage under TPDES General Permit No. TXG670000 or obtaining an individual TPDES permit.
14. This TPDES general permit regulates the discharges of wastewater into surface water in the state. Activities associated with oil and gas extraction activities not associated with discharges into surface water in the state are regulated by the Railroad Commission of Texas (RRC) (and potentially EPA). Such activities include, but are not limited to drilling new wells, plugging and abandoning existing wells, blowout prevention control, spill prevention, surface coatings and preparation, and other activities not associated with wastewater discharges into water in the state.
15. This TPDES general permit does not authorize discharges into Areas of Biological Concern, including marine sanctuaries and live bottom areas.
16. This TPDES general permit does not authorize discharges of radiological substances or materials in excess of the amount regulated by 30 TAC Chapter 336 as required by 30 TAC § 307.4(c).
17. This TPDES general permit does not authorize discharges from centralized waste treatment (CWT) facilities as defined in 40 CFR Part 437 that receive wastes generated from oil and gas extraction facilities. Such CWT facilities seeking authorization to discharge into surface water in the state must obtain an individual TPDES permit.

18. This TPDES general permit does not authorize the discharge of wastewater generated at a location where that wastewater is prohibited from discharge to waters in the U.S. from a location where that wastewater is authorized for discharge to waters in the U.S., as established in 40 CFR Part 435, Subpart G (One example of what is not allowed under this restriction is produced wastewater generated at a coastal facility, where produced wastewater is prohibited from discharge, being transported to, and being discharged from, a territorial seas facility, where such discharge is authorized).
19. Discharges authorized under this TPDES general permit into the Gulf of Mexico are restricted to oil and gas extraction activities as established in 40 CFR Part 435. Other offshore activities located in the Gulf of Mexico, such as carbon sequestration activities, are not authorized by this TPDES general permit and are required to obtain an individual TPDES permit.

Section C. Application for Authorization

1. Facilities that seek to discharge under authority of this TPDES general permit shall submit a completed Notice of Intent (NOI) on a form approved by the Executive Director. Permittees authorized under NPDES General Permit No. TXG260000, effective February 8, 2012, or NPDES General Permit No. TXG330000, effective September 11, 2014, are required to submit a new NOI within 90 days of the effective date of this TPDES general permit to continue authorization to discharge. Permittees authorized to discharge to surface water in the state via an existing RRC authorization may submit a new NOI within 90 days of the expiration date of their existing RRC authorization to continue authorization to discharge. The NOI shall, at a minimum, include: the legal name and address of the owner and operator, the facility name and address, specific description(s) of the location of the facility, type of facility and discharges, the receiving waters, and other requirements established in the NOI. Each individual discharging facility (e.g., production platform, drilling rig, central tank battery and associated surface treatment tanks, etc.) is required to submit an individual NOI. This TPDES general permit does not authorize multiple discharging facilities under a lease to be combined into one NOI. Should a facility contain all waste streams and transport them to another facility for subsequent treatment, management, and discharge, such a facility is not required to submit an NOI provided there are no resulting discharges to surface water in the state from the facility.

2. Submission of an NOI is an acknowledgment that the conditions of this TPDES general permit are applicable to the proposed discharge(s) to surface water in the state, and that the applicant agrees to comply with the conditions of this TPDES general permit.
 - a. Provisional authorization begins 48 hours after a completed NOI is postmarked for delivery to the TCEQ. The NOI shall be submitted to the address indicated on the NOI form. If the TCEQ provides for electronic submission of NOIs during the term of this TPDES general permit, authorization begins immediately after the TCEQ confirms receipt of the electronic NOI. Following review of the NOI, the Executive Director will either:
 - (i) determine that the NOI is complete and confirm authorization by providing a written notification and an authorization number;
 - (ii) determine that the NOI is incomplete and request additional information needed to complete the NOI; or
 - (iii) deny authorization in writing. Denial of authorization will be made in accordance with 30 TAC § 205.4, *Authorizations and Notices of Intent*.
 - b. Stripper Well Facilities seeking authorization to discharge to a MS4 must provide a copy of the NOI, or electronic equivalent, to the operator of the system at the same time an NOI is submitted to the TCEQ.
3. For discharges from Stripper Well Facilities located in areas regulated by 30 TAC Chapter 213, *Edwards Aquifer*, an authorization to discharge under this TPDES general permit is separate from the requirements of that chapter. Discharge may not commence for sites regulated under 30 TAC Chapter 213 until all applicable requirements in that chapter are met. 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 shown below. The applicant may not discharge until authorization is received from the regional office.

Counties: Comal, Bexar, Medina, Uvalde, and Kinney
Contact: TCEQ Edwards Aquifer Program Manager
San Antonio Regional Office
14250 Judson Rd.
San Antonio, Texas 78233-4480
210-490-3096

Counties: Bell, Williamson, Travis, and Hays
Contact: TCEQ Edwards Aquifer Program Manager
Austin Regional Office
P.O. Box 13087, MC-R11
Austin, TX 78711-3087
512-239-2929

4. Authorization under this TPDES general permit is not transferable. If either the owner or operator of the regulated entity changes, then both the present owner and operator must submit a Notice of Termination (NOT) and the new owner and operator must submit an NOI. The NOT and NOI must be submitted no later than 10 days before the change. Stripper Well Facilities discharging to an MS4 must submit a copy of the NOT to the operator of the system at the same time the NOT is submitted to the TCEQ
5. If the owner or operator becomes aware that he or she failed to submit any relevant facts, or submitted incorrect information, or if relevant information provided in the NOI changes (for example, phone number, address, outfall information, type of facility or discharges, or the receiving waters), the correct information must be provided to the Executive Director in a Notice of Change (NOC) within 14 days after discovery. Stripper Well Facilities discharging to an MS4 must submit a copy of any NOC to the operator of the system at the same time the NOC is submitted to the TCEQ.

Section D. Termination of Authorization

A permittee shall terminate authorization under this TPDES 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; the discharge becomes authorized under an individual TPDES permit; the use of the facility changes and is no longer subject to regulation under this TPDES general permit; or the discharge becomes unnecessary, is delayed, or is completed. Authorization to discharge terminates on the day that a NOT is postmarked for delivery to the TCEQ. If electronic submission of the NOT is provided, authorization to discharge under this TPDES general permit terminates immediately after TCEQ confirms receipt of the NOT. Compliance with the conditions and requirements of this TPDES general permit is required until an NOT is submitted. Stripper Well Facilities discharging to an MS4 must submit a copy of the NOT to the operator of the system at the same time the NOT is submitted to the TCEQ.

Section E. Authorization Under an Individual TPDES Permit

1. Discharges eligible for authorization under this TPDES general permit may alternatively be authorized under an individual TPDES permit according to 30 TAC Chapter 305, *Consolidated Permits*.
2. When an individual TPDES permit is issued for a discharge that is at that time authorized under this TPDES general permit, the permittee shall submit a NOT to the Executive Director. Authorization to discharge terminates on the day that a NOT is postmarked for delivery to the TCEQ. If electronic submission of the NOT is provided, authorization to discharge under this TPDES general permit terminates immediately after TCEQ confirms receipt of the NOT.

Section F. Permit Expiration

1. This TPDES general permit is effective until five years from the effective date. Authorizations for discharge under the provisions of this TPDES general permit may be issued until the expiration date of the TPDES general permit. This TPDES general permit may be amended, revoked, cancelled, or renewed by the Commission after notice and comment as provided by 30 TAC § 205.3 and § 205.5.
2. If the Commission proposes to reissue this TPDES general permit before the expiration date, the TPDES general permit shall remain in effect after the expiration date for those existing discharges covered by the TPDES general permit in accordance with 30 TAC Chapter 205. The TPDES general permit shall remain in effect for these discharges until the date on which the Commission takes final action on the proposal to reissue this TPDES general permit. However, no new authorizations may be issued under the TPDES general permit after the expiration date.
3. Upon issuance of a renewed or amended TPDES general permit, all facilities, including those covered under the expired TPDES general permit, shall submit an NOI according to the requirements of the new TPDES general permit or obtain an individual TPDES permit for those discharges.
4. If the Commission does not propose to reissue this TPDES general permit within 90 days before the expiration date, permittees must apply for authorization under an individual TPDES permit or, if applicable, an alternative TPDES general permit. If the application for an individual TPDES permit or alternative TPDES general permit is submitted before the TPDES general permit expiration date,

authorization under this expiring TPDES general permit remains in effect until the issuance or denial of an individual TPDES permit or alternative TPDES general permit.

Part III. Permit Requirements

Section A. Effluent Limitations and Monitoring Requirements

1. Stripper Well Facilities

a. Prohibited discharges: The following waste streams are prohibited from discharge to surface water in the state under the terms and conditions of this TPDES general permit.

- (i) Drilling Fluids
- (ii) Drill Cuttings
- (iii) Produced Sand
- (iv) Dewatering Effluent
- (v) Formation Test Fluids
- (vi) Well Completion Fluids
- (vii) Hydrate Control Fluids
- (viii) Domestic Waste
- (ix) Sanitary Waste
- (x) Contaminated Miscellaneous Discharges and Uncontaminated Miscellaneous Discharges
- (xi) Contaminated Stormwater

b. Authorized discharges: The following waste streams are authorized for discharge to surface water in the state subject to the following effluent limitations and monitoring requirements.

- (i) Produced Wastewater, Well Treatment Fluids, and Workover Fluids

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Flow	Report, MGD	N/A	Estimate	Once/month
Total Dissolved Solids	3000 mg/L	N/A	Grab	Once/year
Oil & Grease	35 mg/L	25 mg/L	Grab	Once/month
pH	6.0 - 9.0 standard units	N/A	Grab	Once/month

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Lethal Whole Effluent Toxicity (WET) limit > 100% (Parameter 51711) <i>Daphnia pulex</i> (24-hour acute LC50 ¹)	≥ 100%	≥ 100%	Grab	Once/six months ²
Lethal Whole Effluent Toxicity (WET) limit > 100% (Parameter 51714) <i>Pimephales promelas</i> (24-hour acute LC50 ¹)	≥ 100%	≥ 100%	Grab	Once/six months ²

- ¹ The LC50 (Lethal Concentration 50) is defined as the effluent dilution at which 50% of the organisms survive. See Appendix D for conditions associated with these effluent limitations.
- ² Should well treatment or workover fluids be discharged with produced wastewater, testing of the effluent on such combined discharges shall occur within the once/six months monitoring frequency.

2. Coastal Facilities

- a. Prohibited discharges: The following waste streams are prohibited from discharge to surface water in the state under the terms and conditions of this TPDES general permit.
- (i) Drilling Fluids
 - (ii) Drill Cuttings
 - (iii) Produced Wastewater
 - (iv) Produced Sand
 - (v) Dewatering Effluent
 - (vi) Formation Test Fluids
 - (vii) Well Treatment, Completion, and Workover Fluids
 - (viii) Hydrate Control Fluids
 - (ix) Contaminated Stormwater from inland facilities (located on land and not located in a bay, estuary, or wide tidal river where such discharges are considered deck drainage)
- b. Authorized discharges: The following waste streams are authorized for discharge to surface water in the state subject

to the following effluent limitations and monitoring requirements.

(i) Deck Drainage

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Free Oil ¹	No discharge	N/A	Observation	Once/day

¹ As determined by the presence of a film or sheen upon or discoloration of the surface of the receiving water (visual sheen).

(ii) Domestic Waste

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Flow	Report, MGD	Report, MGD	Instantaneous	Five times/week
Floating Solids, Garbage, Foam	No discharge	N/A	Observation	Once/day
Biochemical Oxygen Demand (5-day)	65 mg/L	20 mg/L	Grab	Once/week
Total Suspended Solids	65 mg/L	20 mg/L	Grab	Once/week
Dissolved Oxygen	2.0 mg/L (minimum)	N/A	Grab	Once/week
Enterococci	130 cfu or MPN/100 mL	35 cfu or MPN/100 mL	Grab	Once/quarter
Fecal Coliform	43 cfu or MPN/100 mL	14 cfu or MPN/100 mL	Grab	Once/quarter
Total Residual Chlorine	1.0 mg/L (minimum) and 4.0 mg/L (maximum)	N/A	Grab	Five times/week
pH	6.0 - 9.0 standard units	N/A	Grab	Once/day

(iii) Sanitary Waste (M10 and M9IM)

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Flow	Report, MGD	Report, MGD	Instantaneous	Five times/week
Floating Solids	No discharge	N/A	Observation	Once/day

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Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Biochemical Oxygen Demand (5-day)	65 mg/L	20 mg/L	Grab	Once/week
Total Suspended Solids	65 mg/L	20 mg/L	Grab	Once/week
Dissolved Oxygen	2.0 mg/L (minimum)	N/A	Grab	Once/week
Enterococci	130 cfu or MPN/100 mL	35 cfu or MPN/100 mL	Grab	Once/quarter
Fecal Coliform	43 cfu or MPN/100 mL	14 cfu or MPN/100 mL	Grab	Once/quarter
Total Residual Chlorine	1.0 mg/L (minimum) and 4.0 mg/L (maximum)	N/A	Grab	Five times/week
pH	6.0 - 9.0 standard units	N/A	Grab	Once/day

(iv) Uncontaminated Miscellaneous Discharges

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Free Oil ¹	No discharge	N/A	Observation	Once/day

¹ As determined by the presence of a film or sheen upon or discoloration of the surface of the receiving water (visual sheen).

(v) Contaminated Miscellaneous Discharges

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Flow	Report, MGD	N/A	Estimate	Once/month
Free Oil ¹	No discharge	N/A	Observation	Once/day
pH	6.0 - 9.0 standard units	N/A	Grab	Once/week
Lethal Whole Effluent Toxicity (WET) limit (Parameter 51712) <i>Menidia beryllina</i> (24-hour acute LC50 ²)	≥ 100%	≥ 100%	Grab	Once/six months

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Lethal Whole Effluent Toxicity (WET) limit (Parameter 51713) <i>Americamysis bahia</i> (24-hour acute LC50 ²)	≥ 100%	≥ 100%	Grab	Once/six months

¹ As determined by the presence of a film or sheen upon or discoloration, of the surface of the receiving water (visual sheen).

² The LC50 (Lethal Concentration 50) is defined as the effluent dilution at which 50% of the organisms survive. See Appendix C for conditions associated with these effluent limitations.

3. Territorial Seas Facilities

a. Prohibited discharges: The following waste streams are prohibited from discharge to surface water in the state under the terms and conditions of this TPDES general permit.

- (i) Drilling Fluids
- (ii) Drill Cuttings
- (iii) Produced Sand
- (iv) Dewatering Effluent
- (v) Formation Test Fluids

b. Authorized discharges: The following waste streams are authorized for discharge to surface water in the state subject to the following effluent limitations and monitoring requirements.

- (i) Produced Wastewater and Hydrate Control Fluids

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Flow	Report, MGD	0.126 MGD	Estimate	Once/day
Free Oil ¹	No discharge	N/A	Observation	Once/day
Oil & Grease	42 mg/L	29 mg/L	Grab	Once/month
Carbonaceous Biochemical Oxygen Demand (5-day)	N/A	6483 mg/L	Grab	Once/month
Ammonia (as N)	N/A	112 mg/L	Grab	Once/month
Temperature	Report, °F	N/A	In-Situ	Once/quarter

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Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Total Dissolved Solids	Report, mg/L	N/A	Grab	Once/quarter
Total Copper	0.371 mg/L	0.175 mg/L	Grab	Once/month
Total Manganese	32.14 mg/L	15.19 mg/L	Grab	Once/month
Total Mercury	Report, mg/L	N/A	Grab	Once/month
Total Zinc	11.57 mg/L	5.47 mg/L	Grab	Once/month
pH	6.0-9.0 standard units	N/A	Grab	Once/week
Sublethal Whole Effluent Toxicity (WET) limit (Parameter 51712) <i>Menidia beryllina</i> (Chronic NOEC ²)	1.1%	1.1%	Grab	Once/quarter
Sublethal Whole Effluent Toxicity (WET) limit (Parameter 51713) <i>Americamysis bahia</i> (Chronic NOEC ²)	1.1%	1.1%	Grab	Once/quarter
Lethal Whole Effluent Toxicity (WET) limit (Parameter 51712) <i>Menidia beryllina</i> (24-hour acute LC50 ³)	≥ 100%	≥ 100%	Grab	Once/six months
Lethal Whole Effluent Toxicity (WET) limit (Parameter 51713) <i>Americamysis bahia</i> (24-hour acute LC50 ³)	≥ 100%	≥ 100%	Grab	Once/six months

¹ As determined by the presence of a film or sheen upon, or discoloration of, the surface of the receiving water (visual sheen).

² The NOEC is defined as the greatest effluent dilution at which no significant sublethality is demonstrated. Significant sublethality is defined as a statistically significant difference between a specified effluent dilution and the control for the sublethal endpoint. See Appendix B for conditions associated with these effluent limitations. The daily maximum limitation established above is a 7-day minimum limitation.

³ The LC50 (Lethal Concentration 50) is defined as the effluent dilution at which 50% of the organisms survive. See Appendix C for conditions associated with these effluent limitations.

(ii) Well Treatment, Completion, and Workover Fluids

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Flow	Report, MGD	Report, MGD	Estimate	Once/day
Free Oil ¹	No discharge	N/A	EPA Approved Method ¹	Once/day
Oil & Grease	42 mg/L	29 mg/L	Grab	Once/month
pH	6.0-9.0 standard units	N/A	Grab	Once/week
Lethal Whole Effluent Toxicity (WET) limit (Parameter 51712) <i>Menidia beryllina</i> (24-hour acute LC50 ²)	> 100%	> 100%	Grab ³	Once/six months
Lethal Whole Effluent Toxicity (WET) limit (Parameter 51713) <i>Americamysis bahia</i> (24-hour acute LC50 ²)	> 100%	> 100%	Grab ³	Once/six months

¹ As determined by the static sheen test utilizing EPA Method 1617 which is published in Appendix 1 to 40 CFR Part 435, Subpart A.

² The LC50 (Lethal Concentration 50) is defined as the effluent dilution at which 50% of the organisms survive. See Appendix C for conditions associated with these effluent limitations.

³ Should the planned or actual discharge occur for a duration of 24 hours or greater, the sample type shall be a 24-hour composite.

(iii) Deck Drainage

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Free Oil ¹	No discharge	N/A	Observation	Once/day

¹ As determined by the presence of a film or sheen upon, or discoloration of, the surface of the receiving water (visual sheen).

(iv) Domestic Waste

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Flow	Report, MGD	Report, MGD	Instantaneous	Five times/week
Floating Solids, and Foam	No discharge	N/A	Observation	Once/day
Biochemical Oxygen Demand (5-day)	65 mg/L	20 mg/L	Grab	Once/week
Total Suspended Solids	65 mg/L	20 mg/L	Grab	Once/week
Dissolved Oxygen	2.0 mg/L (minimum)	N/A	Grab	Once/week
Enterococci	130 cfu or MPN/100 mL	35 cfu or MPN/100 mL	Grab	Once/quarter
Fecal Coliform	43 cfu or MPN/100 mL	14 cfu or MPN/100 mL	Grab	Once/quarter
Total Residual Chlorine	1.0 mg/L (minimum) and 4.0 mg/L (maximum)	N/A	Grab	Five times/week
pH	6.0 - 9.0 standard units	N/A	Grab	Once/day

(v) Sanitary Waste (M10 and M9IM)

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Flow	Report, MGD	Report, MGD	Instantaneous	Five times/week
Floating Solids	No discharge	N/A	Observation	Once/day
Biochemical Oxygen Demand (5-day)	65 mg/L	20 mg/L	Grab	Once/week
Total Suspended Solids	65 mg/L	20 mg/L	Grab	Once/week
Dissolved Oxygen	2.0 mg/L (minimum)	N/A	Grab	Once/week
Enterococci	130 cfu or MPN/100 mL	35 cfu or MPN/100 mL	Grab	Once/quarter
Fecal Coliform	43 cfu or MPN/100 mL	14 cfu or MPN/100 mL	Grab	Once/quarter
Total Residual Chlorine	1.0 mg/L (minimum) and	N/A	Grab	Five times/week

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
	4.0 mg/L (maximum)			
pH	6.0 - 9.0 standard units	N/A	Grab	Once/day

(vi) Uncontaminated Miscellaneous Discharges

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Free Oil ¹	No discharge	N/A	Observation	Once/day

¹ As determined by the presence of a film or sheen upon, or discoloration of, the surface of the receiving water (visual sheen).

(vii) Contaminated Miscellaneous Discharges

Parameter	Daily Maximum Limitations	Daily Average Limitations	Sample Type	Monitoring Frequency
Flow	Report, MGD	N/A	Estimate	Once/month
Free Oil ¹	No discharge	N/A	Observation	Once/day
pH	6.0 - 9.0 standard units	N/A	Grab	Once/week
Lethal Whole Effluent Toxicity (WET) limit (Parameter 51712) <i>Menidia beryllina</i> (24-hour acute LC50 ²)	≥ 100%	≥ 100%	Grab	Once/six months
Lethal Whole Effluent Toxicity (WET) limit (Parameter 51713) <i>Americamysis bahia</i> (24-hour acute LC50 ²)	≥ 100%	≥ 100%	Grab	Once/six months

¹ As determined by the presence of a film or sheen upon, or discoloration of, the surface of the receiving water (visual sheen).

² The LC50 (Lethal Concentration 50) is defined as the effluent dilution at which 50% of the organisms survive. See Appendix C for conditions associated with these effluent limitations.

Section B. General Requirements Applicable to All Facilities Authorized to Discharge under this TPDES General Permit

1. There shall be no discharge of floating solids or visible foam other than in trace amounts, and no discharge of visible oil.
2. The discharge(s) shall not contain a concentration of taste, or odor-producing substances that interfere with the production of potable water by reasonable water treatment methods, impart unpalatable flavor to food fish including shellfish, result in offensive odors arising from the receiving waters, or otherwise interfere with reasonable uses of water in the state.
3. Facilities which generate industrial solid wastes, as defined in 30 TAC § 335.1, shall comply with the provisions of 30 TAC Chapter 335, *Industrial Solid Waste and Municipal Hazardous Waste*. If the requirements of 30 TAC Chapter 335 do not apply, the solid wastes shall be disposed of in accordance with the Texas Health and Safety Code, Chapter 361. Management of industrial solid wastes not under the regulatory jurisdiction of the TCEQ shall be managed in accordance with regulations established by the RRC.
4. The permittee shall take necessary steps to prevent adverse effects to human health, safety, or the environment. The permittee shall immediately cease discharging whenever it is determined that the discharge(s) may endanger human health, safety, or the environment.
5. Disposal of wastewater shall be done in such a manner as to prevent nuisance conditions.
6. The permittee shall provide the following noncompliance notifications:
 - a. Any noncompliance that may endanger human health or safety or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally, by facsimile (FAX), or by email to the appropriate TCEQ regional office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the appropriate TCEQ regional office and the TCEQ Enforcement Division (MC-224) within five working days of becoming aware of the noncompliance. The written report shall contain a description of the noncompliance and its cause; the potential danger to human health or safety or the

environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance and to mitigate its adverse effects.

- b. Any effluent violation that deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the appropriate TCEQ regional office and the TCEQ Enforcement Division (MC-224) within five working days of becoming aware of the noncompliance.
 - c. Any noncompliance other than those specified in paragraphs (a) and (b) above, or any required information not submitted or submitted incorrectly, shall be reported to the TCEQ Enforcement Division (MC-224) as promptly as possible. For effluent limitation violations, non-compliances must be reported on the NetDMR form or if a waiver is obtained on the approved DMR form (EPA No. 3320-1).
7. Applicants seeking authorization to discharge under this TPDES general permit and permittees that are authorized to discharge under this TPDES general permit are hereby issued a waiver from the electronic reporting requirements of 40 CFR Part 127 for application submittal, changes, and termination requirements. Therefore, applicants and permittees may submit NOI, NOT, and NOC forms to TCEQ in paper format. This waiver does not apply to submittal of compliance monitoring DMRs.
 8. Facilities that generate wastes that are prohibited from discharge under Part III, Sections A.1.a, A.2.a, and A.3.a are required to maintain records of the volumes of these wastes generated and their ultimate disposal location (if such waste streams are generated and disposed). Records shall be recorded on a monthly basis and shall be maintained onsite or at another accessible location for review by TCEQ personnel.
 9. There shall be no discharge of halogenated phenolic compounds as part of any waste stream authorized for discharge under the terms and conditions of this TPDES general permit.

Section C. Specific Requirements Applicable to Stripper Well Facilities

1. The discharge(s) may not be located within 300 feet of the intake for a public drinking water supply.

2. The discharge(s) must be a minimum distance of 500 feet from any water well and the discharge(s) shall be managed to minimize the potential of contamination to all public and private wells.
3. When the discharge(s) originates within the boundaries of an MS4, the permittee shall notify the appropriate MS4 operator in writing at least 48 hours prior to initiating the discharge(s).
4. Facilities shall maintain oil and gas production records for each well that demonstrates eligibility for coverage under this TPDES general permit (e.g., maximum production rate of ten barrels of oil per day and other restrictions established in this TPDES general permit). Records shall be maintained onsite or be readily available for access and review by TCEQ personnel.
5. Discharges of stormwater to surface water in the state are exempt from obtaining authority under the TPDES program as established in 40 CFR § 122.26(a)(2)(ii) unless classified as contaminated stormwater as established in 40 CFR § 122.26(b)(14)(iii). Discharges of contaminated stormwater are not authorized under the terms and conditions of this TPDES general permit. Entities seeking such discharge of contaminated stormwater may obtain authorization via TPDES Multi-Sector General Permit No. TXR050000 (operating facilities), TXR150000 (facilities under construction), or an individual TPDES permit.
6. If generated, well treatment fluids and workover fluids shall be managed, treated, and discharged with produced wastewater in accordance with the effluent limitations and monitoring requirements established in Part III, Section A.1.b.i. For purposes of stripper well facilities, hydraulic fracturing fluids are not considered well treatment fluids and are thus prohibited from discharge.
7. There is no mixing zone established for discharges of produced wastewater (or well treatment fluids or workover fluids) authorized under this TPDES general permit. Acute toxic criteria apply at the point of discharge.

Section D. Specific Requirements Applicable to Coastal Facilities

1. Permittees which operate a cooling water intake structure (CWIS) subject to Section 316(b) of the CWA and 40 CFR Part 125, Subpart

- N are subject to the requirements established in Appendix A of this TPDES general permit.
2. Monitoring for the effluent limitation of no free oil for the discharge of deck drainage and contaminated/uncontaminated miscellaneous discharges shall be done when an observation of a visual sheen on the surface of the receiving water is possible in the vicinity of the discharge, and the facility is manned. All other discharges must be sampled in accordance with the monitoring frequencies established in Part III, Section A.2.b of this TPDES general permit, and all other discharges are prohibited when the facility is unmanned.
 3. This TPDES general permit does not authorize on-site disposal of sewage sludge, biosolids, or water treatment residuals. The permittee shall ensure that all sewage sludge, biosolids, and water treatment residuals which are not a hazardous waste (as defined in 30 TAC Chapter 335) are handled, transported, and disposed of in compliance with the applicable provisions of 30 TAC Chapter 312. The permittee shall ensure that all sewage sludge, biosolids, and water treatment residuals which are a hazardous waste (as defined in 30 TAC Chapter 335) are handled, transported, and disposed of in compliance with the applicable provisions of 30 TAC Chapter 335. The permittee shall keep records of all sewage sludge, biosolids, and water treatment residuals removed from the facility. Such records will include the following information:
 - a. volume (dry weight basis) of sewage sludge, biosolids, and water treatment residuals disposed;
 - b. date of disposal;
 - c. identity and registration number of hauler/transporter;
 - d. location and registration or permit number of disposal site; and
 - e. method of final disposal.
 4. Discharges from outfalls that combine multiple waste streams authorized for discharge under Part III, Section A.2.b of this TPDES general permit are subject to all effluent limitations and associated monitoring requirements for every waste stream combined for discharge.
 5. The mixing zone for contaminated miscellaneous discharges is defined as a volume of water within a radius of 200 feet extending over the receiving water from the point where the discharge enters water in the state. Chronic toxic criteria apply at the edge of the mixing zone.

The zone of initial dilution (ZID) for contaminated miscellaneous discharges is defined as a volume of water within a radius of 50 feet extending over the receiving water from the point where the discharge enters water in the state. Acute toxic criteria apply at the edge of the ZID.

6. Adding seawater for the purpose of achieving compliance with whole effluent toxicity (WET) limitations for the discharge of contaminated miscellaneous discharges is prohibited.
7. Discharges of stormwater to surface water in the state from inland coastal facilities (e.g., not located in a bay, estuary, or wide tidal river) are exempt from obtaining authority under the TPDES program as established in 40 CFR § 122.26(a)(2)(ii) unless classified as contaminated stormwater as established in 40 CFR § 122.26(b)(14)(iii). Discharges of contaminated stormwater are not authorized under the terms and conditions of this TPDES general permit and entities seeking to discharge contaminated stormwater may obtain authorization via TPDES Multi-Sector General Permit No. TXR050000 (operating facilities), TXR150000 (facilities under construction), or an individual TPDES permit. Discharges of stormwater from coastal facilities located in a bay, estuary, or wide tidal river are encompassed as authorized discharges under the terms and conditions of this TPDES general permit as deck drainage.
8. Permittees which are currently authorized to discharge contaminated miscellaneous discharges under NPDES General Permit Number TXG330000 and/or an individual RRC authorization shall comply with the following schedule of activities for the attainment of water quality-based final effluent limitations for 24-hour acute lethal WET limitations:
 - a. determine exceedance cause(s);
 - b. develop control options;
 - c. evaluate and select control mechanisms;
 - d. implement corrective action; and
 - e. attain final effluent limitations no later than three years from the date of acknowledgment to discharge under this TPDES general permit.

The permittee shall submit quarterly progress reports in accordance with the following schedule. The requirement to submit quarterly progress reports expires three years from the date of acknowledgment to discharge under this TPDES general permit.

PROGRESS REPORT DATE

January 1

April 1

July 1

October 1

The quarterly progress reports must include a discussion of the interim requirements that have been completed at the time of the report and must address the progress towards attaining the water quality-based final effluent limitations for 24-hour acute lethal WET limitations for the discharge of contaminated miscellaneous discharges at the outfall being discharged no later than three years from the date of acknowledgment to discharge under this TPDES general permit. Should compliance be obtained, the requirement to submit quarterly progress reports is waived, provided the permittee indicates such compliance in the latest quarterly progress report.

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this TPDES general permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

All reports must be submitted to the appropriate TCEQ Regional Office and to the Compliance Monitoring Team (MC-224).

New permittees are subject to effluent limitations for the discharge of contaminated miscellaneous discharges upon authorization to discharge under the terms and conditions of this TPDES general permit.

Section E. Specific Requirements Applicable to Territorial Seas Facilities

1. Permittees which operate a CWIS subject to Section 316(b) of the CWA and 40 CFR Part 125, Subpart N are subject to the requirements established in Appendix A of this TPDES general permit.
2. Monitoring for the effluent limitation of “no free oil for the discharge of produced wastewater, deck drainage, and contaminated/uncontaminated miscellaneous discharges” shall be done when an observation of a visual sheen on the surface of the receiving water is possible in the vicinity of the discharge, and the

facility is manned. All other discharges must be sampled in accordance with the monitoring frequencies established in Part III, Section A.3.b of this TPDES general permit, and all other discharges are prohibited when the facility is unmanned.

3. This TPDES general permit does not authorize on-site disposal of sewage sludge, biosolids, or water treatment residuals. The permittee shall ensure that all sewage sludge, biosolids, and water treatment residuals which are not a hazardous waste (as defined in 30 TAC Chapter 335) are handled, transported, and disposed of in compliance with the applicable provisions of 30 TAC Chapter 312. The permittee shall ensure that all sewage sludge, biosolids, and water treatment residuals which are a hazardous waste (as defined in 30 TAC Chapter 335) are handled, transported, and disposed of in compliance with the applicable provisions of 30 TAC Chapter 335. The permittee shall keep records of all sewage sludge, biosolids, and water treatment residuals removed from the facility. Such records will include the following information:
 - a. volume (dry weight basis) of sewage sludge, biosolids, and water treatment residuals disposed;
 - b. date of disposal;
 - c. identity and registration number of hauler/transporter;
 - d. location and registration or permit number of disposal site; and
 - e. method of final disposal.

4. Discharges from outfalls that combine multiple waste streams authorized for discharge under Part III, Section A.3.b of this TPDES general permit are subject to all effluent limitations and associated monitoring requirements for every waste stream combined for discharge.

5. The mixing zone for produced wastewater discharges; well treatment, completion, and workover fluids; and contaminated miscellaneous discharges, is defined as a volume of water within a radius of 200 feet extending over the receiving water from the point where the discharge enters water in the state. Chronic toxic criteria apply at the edge of the mixing zone.

The ZID for produced wastewater discharges; well treatment, completion, and workover fluids; and contaminated miscellaneous discharges is defined as a volume of water within a radius of 50 feet extending over the receiving water from the point where the discharge enters water in the state. Acute toxic criteria apply at the edge of the ZID.

6. Adding seawater for the purpose of achieving compliance with WET limitations for the discharge of produced wastewater; well treatment, completion, and workover fluids; and contaminated miscellaneous discharges, is prohibited.
7. Discharges of domestic waste are subject to U.S. Coast Guard regulations established at 33 CFR Part 151.
8. Hydrate control fluids are authorized for discharge provided they are routed for treatment and discharge with produced wastewater.
9. Permittees which are currently authorized to discharge produced wastewater under NPDES General Permit No. TXG260000 and/or an individual RRC authorization shall comply with the following schedule of activities for the attainment of water quality-based final effluent limitations for total copper, total manganese, total zinc, 7-day chronic sublethal WET limitations, and 24-hour acute lethal WET limitations at the outfall(s) discharging produced wastewater. Additionally, permittees which are currently authorized to discharge either or both well treatment, completion, and workover fluids; and contaminated miscellaneous discharges under NPDES General Permit Number TXG260000 and/or an individual RRC authorization shall comply with the following schedule of activities for the attainment of water quality-based final effluent limitations for 24-hour acute lethal WET limitations:
 - a. determine exceedance cause(s);
 - b. develop control options;
 - c. evaluate and select control mechanisms;
 - d. implement corrective action; and
 - e. attain final effluent limitations no later than three years from the date of acknowledgment to discharge under this TPDES general permit.

The permittee shall submit quarterly progress reports in accordance with the following schedule. The requirement to submit quarterly progress reports expires three years from the date of acknowledgment to discharge under this TPDES general permit.

PROGRESS REPORT DATE

January 1
April 1
July 1
October 1

The quarterly progress reports must include a discussion of the interim requirements that have been completed at the time of the report and must address the progress towards attaining the water quality-based final effluent limitations for total copper, total manganese, total zinc, 7-day chronic sublethal WET limitations, and 24-hour acute lethal WET limitations (produced wastewater discharges); and 24-hour acute lethal WET limitations (well treatment, completion, and workover fluids; and contaminated miscellaneous discharges) at the outfall being discharged no later than three years from the date of acknowledgment to discharge under this TPDES general permit. Should compliance be obtained, the requirement to submit quarterly progress reports is waived, provided the permittee indicates such compliance in the latest quarterly progress report.

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this TPDES general permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

All reports must be submitted to the appropriate TCEQ Regional Office and to the Compliance Monitoring Team (MC-224).

New permittees are subject to effluent limitations for the discharge of produced wastewater; well treatment, completion, and workover fluids discharges; and contaminated miscellaneous discharges upon authorization to discharge under the terms and conditions of this TPDES general permit.

10. Minimum analytical levels (MALs) are established for the following parameters. By establishing MALs, TCEQ is not requiring use of a specific analytical test method, nor is TCEQ requiring analytical results to be submitted where the laboratory test was run to achieve the MAL. When an analysis of an effluent sample for a pollutant indicates no detectable levels above the MAL and the test method detection level is as sensitive as the specified MAL, a value of zero shall be used for that measurement. When an analysis of an effluent sample for a pollutant indicates no detectable levels and the test method detection level is not as sensitive as the specified MAL, the level of detection achieved shall be used for that measurement. A zero may not be used.

Pollutant	MAL
Total Copper	0.002 mg/L
Total Manganese	0.0005 mg/L
Total Mercury	0.000005 mg/L
Total Zinc	0.005 mg/L

11. Discharges of produced wastewater are granted an exemption for compliance with hazardous metals effluent limitations established under 30 TAC §319.23 per 30 TAC §319.26, except in any case where there is a water quality-based effluent limitation for a metal listed in 30 TAC §319.23 otherwise imposed in this general permit, in which case such discharges must adhere to the water quality-based effluent limitation.
12. Discharges of produced wastewater are restricted to discharge/outfall configurations of discharge pipe diameter no greater than six inches, and discharge depth to sea floor of no less than five meters.

Part IV. Standard Permit Conditions

1. The permittee has a duty to comply with all conditions in this TPDES general permit. Failure to comply with any condition is a violation of the TPDES general permit and the statutes under which the TPDES general permit was issued. Any violation may be grounds for enforcement action, for terminating authorization under this TPDES general permit, or for requiring a permittee to apply for and obtain a TPDES individual permit.
2. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted discharge(s) to maintain compliance with conditions of the TPDES general permit.
3. The permittee, shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) installed or used by the permittee to achieve compliance with conditions of the TPDES general permit. Proper operation and maintenance also include adequate laboratory and process controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with conditions of the TPDES general permit. This provision does not apply to pits and impoundments which are regulated by the RRC and operated with treatment systems resulting in discharges to surface water in the state.

4. At the request of the Executive Director, the permittee shall furnish any information that is necessary to determine whether cause exists for revoking, suspending, or terminating authorization under this TPDES general permit. The requested information must be provided within a reasonable time frame and in no case later than 30 days from the date of the request.
5. The permittee shall give notice to the Executive Director before physical alterations or additions to the permitted facility if such alterations would result in a violation of the TPDES general permit requirements.
6. Inspection and entry shall be allowed per Chapter 26 of the TWC; Texas Health and Safety Code, §§ 361.032 - 361.033 and 361.037; and 40 CFR § 122.41(i). The statement in TWC, § 26.014 that Commission entry of a regulated entity shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection is not grounds for denial or restriction of entry to any part of the regulated entity, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.
7. Standard monitoring and reporting requirements are as follows:
 - a. Samples shall be collected, measurements shall be taken, and visual observations shall be made at times and in a manner so as to be representative of the monitored and/or observed discharge.
 - b. 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 Water Works Association, and the Water Environment Federation), the EPA's, "Methods for Chemical Analysis of Water and Wastes" (1979), or the EPA's, "Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents" (1973). The effluent limitations for the observation of free oil, floating solids, foam, and garbage are not subject to this condition.
 - c. Sample containers, holding times, preservation methods, and analytical methods, shall either follow the requirements in 40 CFR Part 136, or the latest edition of "Standard Methods for the Examination of Water and Wastewater." The effluent

limitations for the observation of free oil, floating solids, foam, and garbage are not subject to this condition.

- d. The permittee shall ensure that properly trained and authorized personnel monitor, sample, and, as applicable, observe the discharge.
- e. The point of discharge, sampling point and observation point (as applicable) must be downstream of any treatment unit or treatment technique that is used to improve or otherwise alter the quality of the discharge.
- f. Analytical results for determining compliance with effluent limitations shall be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Permittees that are issued an electronic reporting waiver shall submit analytical results to the TCEQ Enforcement Division (MC-224) on an approved DMR form (EPA No. 3320-1). Effluent sampling shall be conducted in accordance with the monitoring frequencies specified in this TPDES general permit. The DMR for any given month shall be due by the 20th day of the following month. The DMR for annual testing must be submitted to TCEQ by March 31st of the following year. All DMRs shall be signed in accordance with the requirements in Part IV.8 of this TPDES general permit. If non-compliance with a discharge limitation occurs, the permittee shall provide notification according to Part III.B.6. of this TPDES general permit.
- g. All laboratory tests submitted to demonstrate compliance with this TPDES general permit must meet the requirements of 30 TAC Chapter 25, *Environmental Testing Laboratory Accreditation and Certification*. The effluent limitations for the observation of free oil, floating solids, foam, and garbage are not subject to this condition.
- h. Records of monitoring and observation activities shall include:
 - (i) date, time, and place of sample, measurement, or observation;
 - (ii) identity of individual who collected the sample, made the measurement, or made the observation;

- (iii) date and time of laboratory analysis (the effluent limitations for the observation of free oil, floating solids, foam, and garbage are not subject to this condition);
 - (iv) identity of the individual and laboratory that performed the analysis (the effluent limitations for the observation of free oil, floating solids, foam, and garbage are not subject to the laboratory condition);
 - (v) the technique or method of analysis (the effluent limitations for the observation of free oil, floating solids, foam, and garbage are not subject to this condition);
 - (vi) the results of the analysis, measurement, or observation; and
 - (vii) quality assurance/quality control records (the effluent limitations for the observation of free oil, floating solids, foam, and garbage are not subject to this condition).
- i. If the permittee monitors any pollutant in a discharge more frequently than required by the TPDES general permit using approved analytical methods as specified in Part IV.7 of this TPDES general 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.
8. All reports, NOIs, NOTs, NOCs, or other information requested by the Executive Director shall meet the requirements of 30 TAC § 305.44, *Signatories to Applications*.
 9. The permittee shall retain copies of all records required by this TPDES general permit, including monitoring and observation records and records related to the application or any certification requirements, for a period of three years from the date of the record. This period may be extended at the request of the Executive Director. The records shall be retained at the facility or be readily available for review by TCEQ personnel upon request.
 10. Authorization under this TPDES general permit may be suspended or revoked for the reasons stated in 30 TAC § 205.4. Notifying the TCEQ of planned changes or an anticipated noncompliance does not stay any TPDES general permit condition.

11. This TPDES general permit does not convey any property rights of any sort, or any exclusive privilege.
12. If the permittee becomes aware that it failed to submit any relevant facts in an NOI or submitted incorrect information in an NOI or in any report to the Executive Director, it shall promptly submit such facts or information.
13. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC Chapter 7 for violations including, but not limited to, the following:
 - a. violating CWA §§ 301, 302, 306, 307, 308, 318, or 405, any condition or limitation implementing any sections in a TPDES general permit issued under CWA § 402, or any requirement imposed in a pretreatment program approved under CWA § 402(a)(3) or (b)(8);
 - b. intentionally or knowingly tampering with, modifying, disabling, or failing to use pollution control or monitoring devices, systems, methods, or practices required under this TPDES general permit; and
 - c. intentionally or knowingly making or causing to be made a false material statement, representation, or certification in, or omitting or causing to be omitted material information from, an application, notice, record, report, plan, or other document, including monitoring device data, filed or required to be maintained by this TPDES general permit.

Part V. Fees

1. NOI fee: An NOI must include a \$800 application fee. A fee is not required for submission of an NOT or NOC.
2. Annual Water Quality Fee: Facilities with an active authorization on September 1 of each year (i.e., those that have not submitted an NOT prior to this date) will be billed \$100 for the following fiscal year.

**Appendix A: Cooling Water Intake Structure (CWIS) Requirements
Applicable to Coastal Facilities and Territorial Seas Facilities**

Section I. Applicability and Limitations on Authorization

A. General Applicability

This appendix applies to coastal facilities and territorial seas facilities that use or propose to use a CWIS.

B. Specific Applicability

1. A new facility which meets the following criteria is subject to the requirements of this appendix.
 - i. It is a point source that uses or proposes to use a CWIS either directly or indirectly via an independent supplier;
 - ii. It has at least one CWIS that uses at least 25 percent of the water withdrawn on an average monthly basis for cooling purposes; and
 - iii. It has a design intake flow greater than two million gallons per day (MGD).
2. A new facility which does not meet all criteria established under Section I, paragraph B.1 of this appendix or an existing facility is subject to the requirements of this appendix on a best professional judgment (BPJ) basis.

C. Exemptions

Use of water obtained from the following sources is exempted from the requirements of this appendix:

1. an active public water system; or
2. treated effluent that would have otherwise been discharged into a Water of the U.S.

D. Limitations on Coverage

Facilities with a CWIS shall not be authorized under this TPDES general permit where:

1. threatened or endangered or otherwise protected federal, state, or tribal species, or critical habitat for these species, are present within the hydraulic zone of influence of the CWIS;

2. migratory and/or sport or commercial species of impingement concern to the Executive Director pass through the hydraulic zone of influence of the CWIS; or
3. the owner or operator of a new facility intends to comply with the Track II requirements established at 40 CFR § 125.134(c).

Section II. Specialized Definitions for Terms Used in this Appendix

Cooling water - Water used for contact or noncontact cooling, including water used for equipment cooling, evaporative cooling tower makeup, and dilution of effluent heat content. The intended use of the cooling water is to absorb waste heat rejected from the process or processes used, or from auxiliary operations on the facility's premises. Cooling water that is used in another industrial process either before or after it is used for cooling is considered process water rather than cooling water for the purposes of calculating the percentage of a new facility's intake flow that is used for cooling purposes in Section I, paragraph B.1.ii of this appendix.

Fixed facility - A bottom founded facility permanently attached to the seabed or subsoil of waters in the coastal or territorial seas (e.g., platforms, guyed towers, articulated gravity platforms) or a buoyant facility securely and substantially moored so that it cannot be moved without a special effort (e.g., tension leg platforms, permanently moored semi-submersibles) and which is not intended to be moved during the production life of the well. This definition does not include mobile offshore drilling units (MODUs) (e.g., drill ships, temporarily moored semi-submersibles, jack-ups, submersibles, tender-assisted rigs, and drill barges).

Hydraulic zone of influence - That portion of the source waterbody hydraulically affected by the CWIS withdrawal of water.

New facility - Any building, structure, facility, or installation that: meets the definition of a "new facility" at 40 CFR § 125.83; is regulated by 40 CFR Part 435 Subpart A or D; and it commenced construction after July 17, 2006.

Sea chest - The underwater compartment or cavity within the facility or vessel hull or pontoon through which sea water is drawn in (for cooling and other purposes) or discharged.

Waters of the United States or Waters of the U.S. - The term as defined in 40 CFR § 120.2.

Other special definitions can be found at 40 CFR §§ 125.83, 125.92 and 125.133.

Section III. CWIS Requirements.

A. Operational Requirements.

Each CWIS utilized by a new or existing facility which is subject to this appendix based on Section I, paragraph B (of this appendix), must meet the following operational requirements to demonstrate compliance with CWA Section 316(b) under this TPDES general permit.

1. Design and construction of each CWIS must have a maximum through-screen design intake velocity of 0.5 feet/second.
2. For CWISs located in an estuary or tidal river, the total design intake flow over one tidal cycle of ebb and flow must be no greater than one (1) percent of the volume of the water column within the area centered about the opening of the intake with a diameter defined by the distance of one tidal excursion at the mean low water level.
3. A new facility which is a fixed facility *without* sea chests must also select and implement design and construction technologies or operational measures for minimizing entrainment of entrainable life stages of fish and shellfish.

B. Monitoring Requirements

A new facility which meets all criteria under Section I, paragraph B.1 of this appendix, must conduct the following monitoring activities for each CWIS to demonstrate compliance with CWA Section 316(b) under this TPDES general permit.

1. **Biological monitoring.** A new facility which is a fixed facility *without* sea chests must monitor for entrainment. The facility must collect samples to monitor entrainment rates (simple enumeration) for each species over a 24-hour period and no less than biweekly during the primary period of reproduction, larval recruitment, and peak abundance identified during the Source Water Baseline Biological Characterization required by Section IV, paragraph D.1 of this appendix below. Sampling must occur only when the CWIS is in operation.
2. **Velocity monitoring.** If the facility uses a surface intake screen system, it must monitor head loss across the screens and correlate the measured value with the design intake velocity.

The head loss across the intake screen must be measured at the minimum ambient source water surface elevation (BPJ based on available hydrological data). The maximum head loss across the screen for each CWIS must be used to determine compliance with the velocity requirement in Section III, paragraph A.1 of this appendix. If the facility uses devices other than surface intake screens, it must monitor velocity at the point of entry through the device. The facility must monitor head loss or velocity during initial facility startup, and thereafter, at a frequency of no less than once per quarter.

3. Visual or remote inspections. The facility must either conduct visual inspections or employ remote monitoring devices during the period the CWIS is in operation. The facility must conduct visual inspections at least weekly to ensure that any design and construction technologies required in Section III, paragraph A.3 of this appendix are maintained and operated to ensure that they will continue to function as designed. Alternatively, the facility may inspect via remote monitoring devices to ensure that the entrainment technologies are functioning as designed.

C. Record-Keeping Requirements.

1. A new or existing facility which is subject to this appendix based on Section I, paragraph B, must keep records of the following for a period of at least three (3) years from the date of obtaining authorization to discharge under this TPDES general permit: all the data used to complete the NOI and show compliance with the requirements; any supplemental information developed under Section IV of this appendix; and any compliance monitoring data required under Section III, paragraph B of this appendix.
2. A new facility which meets all criteria under Section I, paragraph B.1 of this appendix, must also provide the following information to the Executive Director in a yearly status report:
 - i. for fixed facilities *without* sea chests, biological monitoring records for each CWIS as required by paragraph B.1 of this section;
 - ii. velocity and head loss monitoring records for each CWIS as required by paragraph B.2 of this section; and
 - iii. records of visual or remote inspections as required in paragraph B.3 of this section.

Section IV. NOI Materials

The facility must submit application materials for each CWIS that is used to obtain water for cooling purposes.

A. Applicability. This Section applies to:

1. a new facility which meets all criteria under Section I, paragraph B.1 of this appendix and is:
 - i. a fixed facility which employs or will employ sea chests must submit information required by paragraphs B - F in this section;
 - ii. a fixed facility *without* sea chests must submit information required by paragraphs B - G of this section; or
 - iii. an unfixed facility must submit information required by paragraphs C (except C.2), D.2, E, and F of this section.
2. a new facility which does not meet all the criteria under Section I, paragraph B.1 of this appendix, but is not exempt from requirements for CWISs under Section I, paragraph C of this appendix, must submit information required by Section IV, paragraphs C (except C.2, if unfixed), D.2, E, and F of this appendix.
3. an existing facility that is not exempt from requirements for CWISs under Section I, paragraph C of this appendix must submit information required by Section IV, paragraphs C (except C.2, if unfixed), D.2, E, and F of this appendix.

B. Required Information: Source water physical data

The following source water physical data must be provided:

1. A narrative description and scaled drawings showing the physical configuration of all source water bodies used by the facility, including areal dimensions, depths, salinity and temperature regimes, and other documentation that supports this determination of the water body type where each CWIS is located;
2. Identification and characterization of the source waterbody's hydrological and geomorphological features, as well as the methods used to conduct any physical studies to determine the

intake's area of influence within the waterbody and the results of such studies; and

3. Locational maps to support the descriptions provided in paragraphs B.1 and B.2 of this section.

C. Required Information: CWIS data

The following information regarding CWIS data must be provided:

1. A narrative description of the configuration of each CWIS and its location in the water body and in the water column;
2. Latitude and longitude in degrees, minutes, and seconds for each of the CWISs;
3. A narrative description of the operation of each of the CWISs, including design intake flows, daily hours of operation, number of days of the year in operation, and seasonal changes, if applicable;
4. A flow-distribution and water-balance diagram that includes all sources of water to the facility, recirculating flows, and discharges; and
5. Engineering drawings of the CWIS.

D. Required Biological information

The following biological information must be provided:

1. Source water baseline biological characterization data. This information is required to characterize the biological community in the vicinity of the CWISs and to characterize the operation of the CWISs. This supporting information must include existing data (if they are available). However, the facility may choose to supplement the data using newly conducted field studies. The information submitted must include:
 - i. a list of the data in paragraphs D.1.ii through v of this section that are not available, and efforts made to identify sources of the data;
 - ii. a list of species (or relevant taxa) for all life stages and their relative abundance in the vicinity of the CWIS;

- iii. identification of the species and life stages that would be most susceptible to impingement and entrainment. Species evaluated should include the forage base as well as those most important in terms of significance to commercial and recreational fisheries;
 - iv. identification and evaluation of the primary period of reproduction, larval recruitment, and period of peak abundance for relevant taxa;
 - v. data representative of the seasonal and daily activities (e.g., feeding and water column migration) of biological organisms in the vicinity of the CWIS; and
 - vi. if supplementing the information requested in paragraph D.1.ii through v of this section with data collected using field studies, supporting documentation for the Source Water Baseline Biological Characterization must include the following: a description of all methods and quality assurance procedures for sampling; data analysis including a description of the study area; taxonomic identification of sampled and evaluated biological assemblages (including all life stages of fish and shellfish); and sampling and data analysis methods. The sampling and/or data analysis methods used must be appropriate for a quantitative survey and based on consideration of methods used in other biological studies performed within the same source water body. The study area should include, at a minimum, the area of influence of the CWIS.
2. Documentation from any fishery management agency(ies) or other relevant information which demonstrates:
 - i. there are no threatened or endangered or otherwise protected federal, state, or tribal species, or critical habitat for these species, within the hydraulic zone of influence of the CWIS; and
 - ii. there are no migratory and/or sport or commercial species of impingement concern to the Executive Director that pass through the hydraulic zone of influence of the CWIS.

E. Required Velocity information.

Submit the following information to the Executive Director to demonstrate the facility is complying with the requirement at Section III, paragraph A.1 of this appendix to meet a maximum through-screen design intake velocity of no more than 0.5 feet/second at each CWIS:

1. a narrative description of the design, structure, equipment, and operation used to meet the velocity requirement; and
2. design calculations showing that the velocity requirement will be met at minimum ambient source water surface elevations (based on BPJ using available hydrological data) and maximum head loss across the screens or other device.

F. Required Source waterbody flow information.

For a fixed facility where the CWIS is located in an estuary or tidal river, the applicant must provide the mean low water tidal excursion distance and any supporting documentation and engineering calculations to show that the CWIS meets the flow requirements under Section III, paragraph A.2 of this appendix.

G. Required Design and Construction Technology Plan.

To demonstrate compliance with Section III, paragraph A.3 of this appendix if applicable, the facility must submit to the Executive Director the following information in a Design and Construction Technology Plan:

1. a narrative description of the design and operation of the design and construction technologies that you will use to minimize entrainment of those species expected to be the most susceptible to entrainment. Provide species-specific information that demonstrates the efficacy of the technology; and
2. design calculations, drawings, and estimates to support the descriptions provided in paragraph 1 of this subsection.

**Appendix B: 7-Day Chronic Marine WET Testing Requirements
Applicable to Territorial Seas Facilities:**

CHRONIC BIOMONITORING REQUIREMENTS: MARINE

The provisions of this appendix apply to the outfall being tested for whole effluent toxicity (WET) testing.

1. Scope, Frequency and Methodology

- a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival or growth of the test organisms.
- b. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified below and in accordance with “Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms,” third edition (EPA-821-R-02-014) or its most recent update:
 - 1) Chronic static renewal 7-day survival and growth test using the mysid shrimp (*Americamysis bahia*) (Method 1007.0). A minimum of eight replicates with five organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.
 - 2) Chronic static renewal 7-day larval survival and growth test using the inland silverside (*Menidia beryllina*) (Method 1006.0). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and general permit.

- c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These effluent dilution concentrations are 0.5%, 0.6%, 0.8%, 1.1%, and 1.5% effluent. The critical dilution, defined as 1.1% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical mixing conditions.
- d. The sublethal NOEC effluent limitation of not less than 1.1% is effective for both test species (see Part III, Sections A.3.b.i and A.3.b.ii of the general permit. Compliance schedules for existing permitted discharges are established in Part III, Section E.9.
- e. Should a test demonstrate significant toxicity (that is, there is a statistically significant difference in survival or growth at the critical dilution when compared to the survival or growth in the control), the testing frequency for that test species increases to monthly until three consecutive tests pass (do not demonstrate statistically significant toxicity), at which time the testing frequency of once per quarter resumes. An NOC as established in Part II, Section C.5 of the general permit is required to be submitted upon a demonstration of significant toxicity that requires an increase in monitoring frequency. Additionally, upon three consecutive tests passing, an NOC is required to be submitted to revert to the once per quarter monitoring frequency.
 - 1) If none of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee may submit this information to the Standards Implementation Team (MC-150) and, upon approval, reduce the testing frequency to once per six months for the invertebrate test species and once per year for the vertebrate test species. A request for a monitoring frequency reduction shall be submitted in an NOC as established in Part II, Section C.5 of the general permit. The NOC shall include written correspondence from the Standards Implementation Team supporting the reduction in monitoring frequency.
 - 2) If one or more of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee shall continue quarterly testing for that species until this general permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant toxicity, the

permittee will resume a quarterly testing frequency for that species until this general permit is reissued.

2. Required Toxicity Testing Conditions

- a. Test Acceptance - The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fails to meet any of the following criteria:
- 1) a control mean survival of 80% or greater;
 - 2) a control mean dry weight of surviving mysid shrimp of 0.20 mg or greater;
 - 3) a control mean dry weight for surviving unpreserved inland silverside of 0.50 mg or greater and 0.43 mg or greater for surviving preserved inland silverside.
 - 4) a control coefficient of variation percent (CV%) between replicates of 40 or less in the growth and survival tests;
 - 5) a critical dilution CV% of 40 or less in the growth and survival endpoints for either growth or survival test. However, if statistically significant lethal or nonlethal effects are exhibited at the critical dilution, a CV% greater than 40 shall not invalidate the test;
 - 6) a percent minimum significant difference of 37 or less for mysid shrimp growth; and
 - 7) a percent minimum significant difference of 28 or less for inland silverside growth.
- b. Statistical Interpretation
- 1) For the mysid shrimp and the inland silverside larval survival and growth tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be in accordance with the manual referenced in Part 1.b of this appendix.
 - 2) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported correctly. The document entitled "Method Guidance

and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)” (EPA 821-B-00-004) provides guidance on determining the validity of test results.

- 3) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the survival in the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 80% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.
 - 4) The NOEC is defined as the greatest effluent dilution at which no significant effect is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which a significant effect is demonstrated. A significant effect is herein defined as a statistically significant difference between the survival, reproduction, or growth of the test organism in a specified effluent dilution compared to the survival, reproduction, or growth of the test organism in the control (0% effluent).
 - 5) The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 2 of this appendix.
- c. Dilution Water
- 1) Dilution water used in the toxicity tests shall be standard, synthetic reconstituted seawater.
 - 2) Upon approval, the permittee may substitute other dilution water with chemical and physical characteristics similar to that of the receiving water.
- d. Samples

- 1) The permittee shall collect a minimum of three grab samples from the outfall being tested. The second and third grab samples will be used for the renewal of the dilution concentrations for each toxicity test.
- 2) The permittee shall collect the grab samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.
- 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the first grab sample. The holding time for any subsequent grab sample shall not exceed 72 hours. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.
- 4) If the outfall being tested ceases discharging during the collection of effluent samples, the requirements for the minimum number of effluent samples, and the sample holding time are waived during that sampling period. However, the permittee must have collected an effluent grab sample volume sufficient to complete the required toxicity tests with renewal of the effluent. The sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report.

3. Reporting

- a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. of this appendix for every test initiated.
- b. The permittee shall routinely report the results of each biomonitoring test in the Table 1 format of this appendix to the Standards Implementation Team (MC-150).
- c. Enter the following codes for the appropriate parameters for valid tests only:
 1. For the mysid shrimp, Parameter TLP3E, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

2. For the mysid shrimp, Parameter TOP3E, report the NOEC for survival.
 3. For the mysid shrimp, Parameter TXP3E, report the LOEC for survival.
 4. For the mysid shrimp, Parameter TWP3E, enter a "1" if the NOEC for growth is less than the critical dilution; otherwise, enter a "0."
 5. For the mysid shrimp, Parameter TPP3E, report the NOEC for growth.
 6. For the mysid shrimp, Parameter TYP3E, report the LOEC for growth.
 7. For the inland silverside, Parameter TLP6J, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
 8. For the inland silverside, Parameter TOP6J, report the NOEC for survival.
 9. For the inland silverside, Parameter TXP6J, report the LOEC for survival.
 10. For the inland silverside, Parameter TWP6J, enter a "1" if the NOEC for growth is less than the critical dilution; otherwise, enter a "0."
 11. For the inland silverside, Parameter TPP6J, report the NOEC for growth.
 12. For the inland silverside, Parameter TYP6J, report the LOEC for growth.
- d. The permittee shall report the sublethal WET values for the 30-day average and the 7-day minimum under Parameter No. 51712 for the inland silverside and Parameter No. 51713 for the mysid shrimp. If more than one valid test was performed during the reporting period, the NOECs will be averaged arithmetically and reported as the daily average NOEC. The data submitted should reflect the lowest sublethal results during the reporting period.

TABLE 1 (SHEET 1 OF 4)

MYSID SHRIMP SURVIVAL AND GROWTH

Date Time Date Time

Dates and Times No. 1 FROM: _____ TO: _____

Samples Collected No. 2 FROM: _____ TO: _____

No. 3 FROM: _____ TO: _____

Test initiated: _____ am/pm _____ date

Dilution water used: _____ Synthetic dilution water _____ Other (approved)

MYSID SHRIMP SURVIVAL

Percent Survival in Replicate Chambers

Percent Effluent	A	B	C	D	E	F	G	H	CV% ¹
0%									
0.5%									
0.6%									
0.8%									
1.1%									
1.5%									

Mean Percent Survival

Percent Effluent	24h	48h	7 day	CV% ¹
0%				
0.5%				
0.6%				
0.8%				
1.1%				
1.5%				

¹ Coefficient of Variation = standard deviation x 100/mean

DATA TABLE FOR GROWTH OF MYSID SHRIMP

Mean dry weight in milligrams in replicate chambers

Replicate	0%	0.5%	0.6%	0.8%	1.1%	1.5%
A						
B						
C						
D						
E						

TABLE 1 (SHEET 2 OF 4)

MYSID SHRIMP SURVIVAL AND GROWTH

DATA TABLE FOR GROWTH OF MYSID SHRIMP (Continued)

Mean dry weight in milligrams in replicate chambers

Replicate	0%	0.5%	0.6%	0.8%	1.1%	1.5%
F						
G						
H						
Mean Dry Weight (mg)						
CV% ¹						
PMSD						

2. Dunnett’s Procedure or Steel’s Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

Is the mean survival at 7 days significantly less than the control survival for the % effluent corresponding to lethality?

CRITICAL DILUTION (1.1%): _____ YES _____ NO

3. Dunnett’s Procedure or Steel’s Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

Is the mean dry weight (growth) at 7 days significantly less than the control’s dry weight (growth) for the % effluent corresponding to non-lethal effects?

CRITICAL DILUTION (1.1%): _____ YES _____ NO

4. Enter percent effluent corresponding to each NOEC\LOEC below:

a) NOEC survival = _____% effluent

b) LOEC survival = _____% effluent

c) NOEC growth = _____% effluent

d) LOEC growth = _____% effluent

TABLE 1 (SHEET 3 OF 4)

INLAND SILVERSIDE MINNOW LARVAL SURVIVAL AND GROWTH TEST

Date Time Date Time

Dates and Times No. 1 FROM: _____ TO: _____

Samples Collected No. 2 FROM: _____ TO: _____

No. 3 FROM: _____ TO: _____

Test initiated: _____am/pm _____date

Dilution water used: _____ Synthetic dilution water _____ Other (approved)

INLAND SILVERSIDE SURVIVAL

Percent Survival in Replicate Chambers

Percent Effluent	A	B	C	D	E	F	G	H	CV% ¹
0%									
0.5%									
0.6%									
0.8%									
1.1%									
1.5%									

Mean Percent Survival

Percent Effluent	24h	48h	7 day	CV% ¹
0%				
0.5%				
0.6%				
0.8%				
1.1%				
1.5%				

¹ Coefficient of Variation = standard deviation x 100/mean

TABLE 1 (SHEET 4 OF 4)

INLAND SILVERSIDE LARVAL SURVIVAL AND GROWTH TEST

INLAND SILVERSIDE GROWTH

Average Dry Weight in milligrams in replicate

Percent Effluent	A	B	C	D	E	Mean Dry Weight (mg)	CV% ¹
0%							
0.5%							
0.6%							
0.8%							
1.1%							
1.5%							
PMSD							

¹ Weights are for: ___ preserved larvae, or ___ unpreserved larvae

- Dunnett’s Procedure or Steel’s Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

Is the mean survival at 7 days significantly less than the control survival for the % effluent corresponding to lethality?

CRITICAL DILUTION (1.1%): _____ YES _____ NO

- Dunnett’s Procedure or Steel’s Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

Is the mean dry weight (growth) at 7 days significantly less than the control’s dry weight (growth) for the % effluent corresponding to non-lethal effects?

CRITICAL DILUTION (1.1%): _____ YES _____ NO

- Enter percent effluent corresponding to each NOEC/LOEC below:

a) NOEC survival = _____% effluent

b) LOEC survival = _____% effluent

- c) NOEC growth = _____% effluent
- d) LOEC growth = _____% effluent

**Appendix C: 24-Hour Acute Marine WET Testing Requirements
Applicable to Coastal Facilities and Territorial Seas Facilities**

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: MARINE

The provisions of this section apply to the outfall being tested for WET testing.

1. Scope, Frequency, and Methodology

- a. The permittee shall test the effluent for lethality in accordance with the provisions in this appendix. Such testing will determine compliance with Texas Surface Water Quality Standard 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.

The permittee may be exempted from complying with 30 TAC § 307.6(e)(2)(B) upon proving that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g., metals) form a salt compound. To obtain this exemption, a permittee is required to submit an individual permit application and obtain an individual TPDES permit allowing an ion-adjustment protocol, alternate species testing, or single species testing.

- b. The toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this appendix of the general permit and in accordance with “Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms,” fifth edition (EPA-821-R-02-012) or its most recent update:

- 1) Acute 24-hour static toxicity test using the mysid shrimp (*Americamysis bahia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.
- 2) Acute 24-hour static toxicity test using the inland silverside (*Menidia beryllina*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and general permit.

- c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. The control shall consist of standard, synthetic, reconstituted seawater.
- d. The WET limits of greater than 50% survival in 100% effluent (LC50 of greater than 100%) after 24-hours are effective for both test species (see Part III, Sections A.2.b.v, A.3.b.i, A.3.b.ii, and A.3.b.vii of the general permit). Compliance schedules for existing permitted discharges are established in Part III, Sections D.8 and E.9.
- e. If a test fails to meet an LC50 of greater than 100%, the testing frequency for that test species will increase to monthly until such time compliance with the WET limit is demonstrated for three consecutive months, at which time the permittee may return to the semi-annual testing frequency. An NOC as established in Part II, Section C.5 of the general permit is required to be submitted upon a demonstration of lethality that requires an increase in monitoring frequency. Additionally, upon three consecutive tests passing, an NOC is required to be submitted to revert to the semi-annual monitoring frequency.

2. Required Toxicity Testing Conditions

- a. Test Acceptance - The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.
- b. Samples
 - 1) The permittee shall collect one grab sample from the outfall being tested.
 - 2) The permittee shall collect the grab sample such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.

- 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the grab sample. The sample shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

3. Reporting

- a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. of this appendix for every test initiated.
- b. The permittee shall routinely report the results of each biomonitoring test in the Table 2 format of this appendix to the Standards Implementation Team (MC-150).
- c. Enter the following codes for the appropriate parameters for valid tests only:
 - 1) For the mysid shrimp, Parameter TIE3E, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."
 - 2) For the inland silverside, Parameter TIE6J, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."
- d. The permittee shall report the LC50 WET values for the 30-day average and the 7-day minimum under Parameter No. 51712 for the inland silverside and Parameter No. 51713 for the mysid shrimp. If more than one valid test was performed during the reporting period, the LC50s will be averaged arithmetically and reported as the daily average LC50. The data submitted should reflect the lowest LC50 results during the reporting period.

TABLE 2 (SHEET 1 OF 2)
 MYSID SHRIMP SURVIVAL
 GENERAL INFORMATION

	Time	Date
Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Percent	effluent	0%	6%	13%	25%	50%	100%
Time	Rep						
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent

TABLE 2 (SHEET 2 OF 2)
 INLAND SILVERSIDE SURVIVAL

	Time	Date
Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Percent	effluent	0%	6%	13%	25%	50%	100%
Time	Rep						
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent

**Appendix D: 24-Hour Acute Freshwater WET Testing Requirements
Applicable to Stripper Well Facilities**

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this appendix apply to the outfall being tested for WET testing.

1. Scope, Frequency, and Methodology

- a. The permittee shall test the effluent for lethality in accordance with the provisions in this appendix. Such testing will determine compliance with Texas Surface Water Quality Standard 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.

The permittee may be exempted from complying with 30 TAC § 307.6(e)(2)(B) upon proving that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g., metals) form a salt compound. To obtain this exemption, a permittee is required to submit an individual permit application and obtain an individual TPDES permit allowing an ion-adjustment protocol, alternate species testing, or single species testing.

- b. The toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this appendix of the general permit and in accordance with “Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms,” fifth edition (EPA-821-R-02-012) or its most recent update:

- 1) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.
- 2) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and general permit.

- c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. The control shall consist of standard, synthetic, moderately hard, reconstituted water.
- d. The WET limits of greater than 50% survival in 100% effluent (LC50 of greater than 100%) after 24-hours are effective for both test species (see Part III, Section A.1.b.i of the general permit).
- e. If a test fails to meet an LC50 of greater than 100%, the testing frequency for that test species will increase to monthly until such time compliance with the WET limit is demonstrated for three consecutive months, at which time the permittee may return to the semi-annual testing frequency. An NOC as established in Part II, Section C.5 of the general permit is required to be submitted upon a demonstration of lethality that requires an increase in monitoring frequency. Additionally, upon three consecutive tests passing, an NOC is required to be submitted to revert to the semi-annual monitoring frequency.

2. Required Toxicity Testing Conditions

- a. Test Acceptance - The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.
- b. Samples
 - 1) The permittee shall collect one grab sample from the outfall being tested.
 - 2) The permittee shall collect the grab sample such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.

- 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the grab sample. The sample shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

3. Reporting

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this general permit in accordance with the manual referenced in Part 1.b. of this appendix for every test initiated.
- b. The permittee shall routinely report the results of each biomonitoring test in the Table 3 format of this appendix to the Standards Implementation Team (MC-150).
- c. Enter the following codes for the appropriate parameters for valid tests only:
 - 1) For the water flea, Parameter TIE3D, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."
 - 2) For the fathead minnow, Parameter TIE6C, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."
- d. The permittee shall report the LC50 WET values for the 30-day average and the 7-day minimum under Parameter No. 51711 for the water flea and Parameter No. 51714 for the fathead minnow. If more than one valid test was performed during the reporting period, the LC50s will be averaged arithmetically and reported as the daily average LC50. The data submitted should reflect the lowest LC50 results during the reporting period.

TABLE 3 (SHEET 1 OF 2)
 WATER FLEA SURVIVAL
 GENERAL INFORMATION

	Time	Date
Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Percent	effluent	0%	6%	13%	25%	50%	100%
Time	Rep						
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent

TABLE 3 (SHEET 2 OF 2)

FATHEAD MINNOW SURVIVAL

	Time	Date
Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Percent	effluent	0%	6%	13%	25%	50%	100%
Time	Rep						
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent