

Fact Sheet and Executive Director's Preliminary Decision TPDES General Permit TXG11000

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Permit Action: Reissuance and Amendment of Proposed General Permit No. TXG110000 to Discharge Into or Adjacent to Water in the State

I. Summary

The Texas Commission on Environmental Quality (TCEQ) is proposing to amend and reissue a general permit authorizing discharges of facility wastewater and storm water associated with industrial activities into or adjacent to water in the state from ready-mixed concrete plants, concrete products plants, and their associated facilities (SIC 3271, 3272, and 3273). The general permit specifies which facilities may be authorized under this general permit and those that must be authorized by individual permit. If an entity wants authorization under this general permit but does not fall under SIC Codes 3271, 3272, or 3273 (for example, SIC Code 1629), it may contact the TCEQ's Industrial Permits Team regarding the applicability of the permit for its facility.

II. Executive Director's Recommendation

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

III. Permit Applicability and Coverage

This general permit authorizes the discharge of facility wastewater and storm water associated with industrial activities into or adjacent to water in the state from ready-mixed concrete plants, concrete products plants, and their associated facilities (SIC 3271, 3272, and 3273). This general permit specifies which facilities may be authorized under it and those that must be authorized by individual permit.

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- A. The following discharges are not eligible for general permit coverage:
1. Discharges prohibited by 30 TAC Chapter 311, Watershed Protection, and 30 TAC Chapter 213, *Edwards Aquifer*;
 2. Discharges of the constituent or constituents of concern to impaired water bodies when there is a TCEQ approved total maximum daily load (TMDL) implementation plan unless the discharges are consistent with the approved TMDL and the implementation plan. Constituents of concern are those causing a water body to be listed as impaired;
 3. Discharges that will not meet water quality standards, cause a violation of water quality standards, cause or contribute to a water quality violation, or fail to protect and maintain existing designated uses;
 4. New sources or new discharges of a constituent(s) of concern to impaired waters unless otherwise allowable under 30 TAC Chapter 305, *Consolidated Permits*, and applicable state law. Impaired waters are those that do not meet applicable water quality standards and are listed on the Clean Water Act (CWA) §303(d) list. Constituents of concern are those causing a water body to be listed as impaired;
 5. Discharges that would adversely affect a listed endangered or threatened species or its critical habitat. Federal requirements related to endangered species apply to all Texas Pollutant Discharge Elimination System (TPDES) permitted activities, and site-specific controls may be required to ensure that protection of endangered or threatened species is achieved; and
 6. Discharges from a facility rated as a poor performer as defined in 30 TAC §60.3(a), *Use of Compliance History*, or has other compliance history issues that may indicate the lack of ability of the permittee to comply with the permit and commission rules.
- B. Facilities that dispose of wastewater or storm water by any of the following practices are not required to obtain coverage under this general permit nor an individual permit:
1. Recycling of the wastewater or storm water with no resulting discharge into or adjacent to water in the state;
 2. Pumping and hauling of the wastewater or storm water to an authorized disposal facility;
 3. Discharge to a permitted wastewater treatment facility;
 4. Underground injection in accordance with 30 TAC Chapter 331, *Underground Injection Control*; or

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5. Discharge to above ground storage tanks with no resulting discharge into or adjacent to water in the state.

IV. Permit Conditions and Effluent Limitations

A. Facility wastewater and facility wastewater commingled with storm water associated with industrial activities.

1. Discharges of facility wastewater and facility wastewater commingled with storm water associated with industrial activities are subject to the following effluent limitations:

Table 1. Conventional Pollutant Effluent Limitations and Monitoring Frequencies

Parameter	Daily Maximum	Sample Type	Monitoring Frequency
Flow	Report MGD	Estimate	1/month*
Oil and Grease	15 mg/L	Grab	1/month*
Total Suspended Solids	65 mg/L	Grab	1/month*
pH	6.0 - 9.0 Standard Units	Grab	1/month*
**If there is a discharge from the facility within a calendar month a minimum of one sample of the discharge must be taken.			

Table 2. Toxic Pollutant Effluent Limitations and Monitoring Frequencies

Parameter	Monthly Average	Daily Maximum	Sample Type	Monitoring Frequency
Arsenic, Total	0.1 mg/L	0.3 mg/L	Grab	1/year*
Barium, Total	1.0 mg/L	4.0 mg/L	Grab	1/year*
Cadmium, Total (inland waters)	0.05 mg/L	0.2 mg/L	Grab	1/year*
Cadmium, Total (tidal waters)	0.1 mg/L	0.3 mg/L	Grab	1/year*
Chromium, Total	0.5 mg/L	5.0 mg/L	Grab	1/year*
Copper, Total	0.5 mg/L	2.0 mg/L	Grab	1/year*

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Parameter	Monthly Average	Daily Maximum	Sample Type	Monitoring Frequency
Lead, Total	0.5 mg/L	1.5 mg/L	Grab	1/year*
Manganese, Total	1.0 mg/L	3.0 mg/L	Grab	1/year*
Mercury, Total	0.005 mg/L	0.01 mg/L	Grab	1/year*
Nickel, total	1.0 mg/L	3.0 mg/L	Grab	1/year*
Selenium, Total (inland waters)	0.05 mg/L	0.2 mg/L	Grab	1/year*
Selenium, Total (tidal waters)	0.1 mg/L	0.3 mg/L	Grab	1/year*
Silver, Total	0.05 mg/L	0.2 mg/L	Grab	1/year*
Zinc, Total	1.0 mg/L	6.0 mg/L	Grab	1/year*
* If there is a discharge from the facility a minimum of one sample of the discharge must be taken.				

2. Discharges of facility wastewater and facility wastewater commingled with storm water associated with industrial activities are subject to whole effluent 24-hour acute toxicity monitoring.

B. Storm Water Discharge Associated with Industrial Activities

1. Benchmark monitoring values:

Table 3. Benchmark Parameters and Values

Benchmark Parameter	Benchmark Value
Oil and Grease	15 mg/L
Total Suspended Solids	50 mg/L
pH	6.0 -9.0 Standard Units
Total Iron	1.3 mg/L

The permittee is required to compare the results of sample analyses to the benchmark values above and must include this comparison in the overall assessment of the SWP3 effectiveness. Exceedances of the benchmark values indicate that the SWP3 should be assessed and modifications may be necessary to protect water quality.

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2. Numeric Effluent Limits

Table 4. Hazardous Metals Numeric Effluent Limitations and Monitoring Frequencies

Parameter	Monthly Average	Sample Type	Monitoring Frequency
Arsenic, Total	0.1 mg/L	Grab	1/year
Barium, Total	1.0 mg/L	Grab	1/year
Cadmium, Total (inland waters)	0.05 mg/L	Grab	1/year
Cadmium, Total (tidal waters)	0.1 mg/L	Grab	1/year
Chromium, Total	0.5 mg/L	Grab	1/year
Copper, Total	0.5 mg/L	Grab	1/year
Lead, Total	0.5 mg/L	Grab	1/year
Manganese, Total	1.0 mg/L	Grab	1/year
Mercury, Total	0.005 mg/L	Grab	1/year
Nickel, Total	1.0 mg/L	Grab	1/year
Selenium, Total (inland waters)	0.05 mg/L	Grab	1/year
Selenium, Total (tidal waters)	0.1 mg/L	Grab	1/year
Silver, Total	0.05 mg/L	Grab	1/year
Zinc, Total	1.0 mg/L	Grab	1/year

- 3. A storm water pollution prevention plan (SWP3) must be prepared and implemented for each facility. The SWP3 must identify potential sources of pollution that may reasonably be expected to affect the quality of discharges of storm water associated with industrial activities. In addition, the SWP3 must describe and**

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ensure the implementation of practices that are to be used to reduce the pollutants in these discharges and to ensure compliance with the terms and conditions of this general permit, including the protection of water quality. Facilities must implement the provisions of the SWP3 as a condition of this general permit.

4. The permittee is required to maintain a rain gauge on-site, or use a rain gauge located in the immediate vicinity of the site, in order to determine when a representative storm event occurs. The rain gauge must be monitored a minimum of once per week.

V. Changes from Existing General Permit

- A. Removed language regarding concrete truck washout at off-site construction facilities. This requirement is applicable to construction sites and is authorized under TPDES Construction General Permit TXR150000.
- B. Language was included regarding discharges to impaired waters and discharges that would adversely affect endangered and threatened species. This language is consistent with other TPDES wastewater general permits.
- C. An additional requirement was added to ensure that all laboratory tests submitted to demonstrate compliance with this permit, meet the requirements of 30 TAC Chapter 25, *Environmental Testing Laboratory Accreditation and Certification*.
- D. Included or revised definitions for associated facilities, best management practices (BMPs), Edwards Aquifer, Edwards Aquifer Recharge Zone and storm water associated with industrial activities.
- E. The following changes were made for storm water only discharges to be consistent with the proposed renewal of the TPDES Multi-Sector Industrial General Permit for Storm Water No. TXR050000:
 - i. Added a requirement that facilities authorized to discharge storm water associated with industrial activities must maintain a rain gauge on site to determine when a representative rain event occurs.
 - ii. Revised benchmark values for total suspended solids and total iron. The values in the MSGP were revised during the 2011 renewal based on data collected from facilities operating under the sector covering concrete production facilities.
 - iii. Revised language for measureable storm events to require sampling if there is a measurable discharge regardless of the rainfall amount.
 - iv. Added limits and requirements for monitoring and sampling of hazardous metals for discharges of storm water associated with industrial activities not commingled with facility wastewater.
 - v. Included a requirement to conduct quarterly visual monitoring for storm water outfalls.

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VI. Addresses

- A. Questions concerning this proposed draft general permit should be sent to:

Industrial Permits Team (MC-148)
TCEQ
P.O. Box 13087
Austin, TX 78711-3087
(512) 239-4671

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

Chief Clerk's Office (MC-105)
TCEQ
P.O. Box 13087
Austin, TX 78711-3087

VII. Supplementary information in this Fact Sheet is organized as follows:

- VIII. Legal Basis
- IX. Regulatory Background
- X. Permit Coverage
- XI. Technology-Based Requirements
- XII. Water Quality-Based Requirements
- XIII. Monitoring and Reporting
- XIV. Procedures for Final Decision
- XV. Administrative Record

VIII. Legal Basis

Texas Water Code (TWC) §26.121 makes it unlawful to discharge pollutants into or adjacent to water in the state except as authorized by a rule, permit, or order issued by the commission. TWC §26.027 authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state. TWC §26.040 provides the commission with the authority to amend or adopt, as necessary to implement this section, rules adopted under TWC §26.040, and to authorize waste discharges by general permit. On September 14, 1998, the TCEQ received authority from the United States Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) program. The approved state program is known as the Texas Pollutant Discharge Elimination System (TPDES) program. The TCEQ and the EPA have signed a Memorandum of Agreement, which establishes policies, responsibilities, and procedures for program commitments between TCEQ and EPA Region 6 for the assumption of the NPDES program by the TCEQ.

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The CWA §§301, 304, and 401; 33 United States Code (USC) §§1331, 1314, and 1341 include provisions that state that NPDES permits must include effluent limitations requiring authorized discharges to: (1) meet standards reflecting levels of technological capability; (2) comply with EPA-approved state water quality standards; and (3) comply with other state requirements adopted under authority retained by states under CWA §510 and 33 USC §1370.

Two types of technology-based effluent limitations must be included in the general permit. With regard to conventional pollutants (pH, biochemical oxygen demand (BOD), oil and grease, total suspended solids (TSS), and bacteria) the CWA §301(b)(1)(E) requires effluent limitations based on “best conventional pollutant control technology” (BCT). With regard to nonconventional and toxic pollutants, CWA §301(b)(2)(A), (C), and (D) requires effluent limitations based on “best available technology economically achievable” (BAT), a standard that generally represents the best performing existing technology in an industrial category or subcategory. BAT and BCT effluent limitations may never be less stringent than corresponding effluent limitations based on best practicable control technology (BPT), a standard applicable to similar discharges before March 31, 1989 under CWA §301(b)(1)(A).

Frequently, EPA adopts nationally applicable guidelines identifying the BPT, BCT, and BAT standards to which specific industrial categories and subcategories are subject. Until such guidelines are published, however, CWA §402(a)(1) requires that appropriate BCT and BAT effluent limitations be included in permitting actions on the basis of best professional judgment (BPJ).

IX. Regulatory Background

The commission was given authority to issue general permits by HB 1542 passed during the 75th legislative session. Further clarification of general permit authority was provided in subsequent legislation, HB 1283, passed during the 76th legislative session. As a result of this authority and in accordance with a memorandum of agreement between the EPA and TCEQ relating directly to the TPDES permit program, the commission is seeking to reissue this general permit.

X. Permit Coverage

This general permit authorizes the discharge of facility wastewater and storm water associated with industrial activities into or adjacent to water in the state by ready-mixed concrete plants, concrete products plants, and their associated facilities. The permit specifies which facilities may be authorized under this general permit and those that must be authorized by individual permit.

- A. Applicants seeking authorization to discharge under this general permit must submit a completed notice of intent (NOI) on a form approved by the executive director. Existing discharges authorized under the expiring general permit are required to submit a new NOI within 90 days after the effective date of the general permit to continue authorization. The NOI must include, at a minimum, the legal name and address of the owner and

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operator, the facility name and address, specific description of its location, type of facility or discharges and the receiving water(s).

- B. Submission of an NOI is an acknowledgment that the conditions of this general permit are applicable to the proposed discharge, and that the applicant agrees to comply with the conditions of this general permit. Provisional authorization begins 48 hours after a completed NOI is postmarked for delivery to the TCEQ. Following review of the NOI, the executive director will: a) determine that the NOI is complete and confirm coverage by providing a written notification and an authorization number; b) determine that the NOI is incomplete and request additional information needed to complete the NOI; or c) deny coverage in writing. Denial of coverage will be made in accordance with 30 TAC §205.4, *Applications and Notices of Intent*. If the TCEQ provides for electronic submission of NOIs during the term of this permit, and an NOI is submitted electronically, authorization begins 24 hours following confirmation of receipt of the electronic NOI.

Applicants seeking authorization to discharge to a municipal separate storm sewer system (MS4) must provide a copy of the NOI to the operator of the MS4 at the same time an NOI is submitted to the TCEQ.

- C. 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. Discharge may not commence for sites regulated under 30 TAC Chapter 213, *Edwards Aquifer*, until all applicable requirements of the Edwards Aquifer rules are met, including a TCEQ approved Edwards Aquifer Protection Plan, if applicable.
- D. Authorization under this general permit is not transferable. If either the owner or operator of the regulated entity is changing, then the present owner and operator must submit a notice of termination (NOT) and the future owner and operator must submit an NOI. The NOT and NOI must be submitted no later than 10 days before the change. Permittees discharging to an MS4 must submit a copy of the NOT and NOI to the MS4 at the same time the NOT and NOI are submitted to the TCEQ.

XI. Technology-Based Requirements

The limitations and conditions of the proposed general permit have been developed to comply with the technology-based standards of the CWA. There are currently no nationally applicable guidelines for these categories of dischargers identifying the BPT, BCT, or BAT standards. Technology-based effluent limitations included in the general permit are based on BPJ.

The parameters selected for BCT and BAT limits for the primary pollutants of concern for discharges of facility wastewater and facility wastewater commingled with storm water are oil and grease, total suspended solids, and pH. The BCT limitations for these parameters are 15 mg/l oil and grease (as a daily maximum);

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65 mg/l total suspended solids (as a daily maximum); and between 6 and 9 standard units pH. These effluent limitations are economically achievable and are continued from the existing general permit. Additionally, BAT limitations are included for arsenic, barium, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, and zinc. Numeric effluent limitations for these total metals are established according to 30 TAC Chapter 319, *General Regulations Incorporated into Permits*, and are consistent with the effluent limitations in the current general permit.

Benchmark levels are included in the draft general permit for storm water only discharges consistent with the benchmark levels in the MSGP. Oil and grease and pH are typical parameters that are monitored in storm water discharges from industrial facilities and are continued from the existing permit.

The draft general permit includes the requirement to develop and implement a SWP3 for discharges of storm water associated with industrial activities. This requirement constitutes BCT and BAT.

XII. Water Quality-Based Requirements

The Texas Surface Water Quality Standards (TSWQS) codified at 30 TAC Chapter 307, state that “surface waters will not be toxic to man or to terrestrial or aquatic life.” The methodology outlined in TCEQ’s *Procedures to Implement the Texas Surface Water Quality Standards* (RG-194) is designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health.

TPDES permits contain technology-based effluent limits reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and conditions are included in the TPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other toxicity databases to determine the adequacy of technology-based permit limits and the need for additional water-quality based controls. After review by the TCEQ Water Quality Standards Team and the Wastewater Permitting Section, it was determined that the proposed technology-based effluent limits are protective of water quality.

In accordance with 30 TAC §307.5, *Antidegradation*, and the TCEQ implementation procedures for the TSWQS, an antidegradation review of the general permit was performed. It has been preliminarily determined that where permit requirements and storm water pollution prevention plans are properly implemented no significant degradation is expected and existing uses will be maintained and protected. See Standards Team memo dated May 24, 2010.

The Texas Surface Water Quality Standards also require that discharges must not be acutely toxic to aquatic life, as determined by requiring greater than 50% survival in 100% effluent using a 24-hour acute toxicity test. The draft general permit includes a requirement for whole effluent toxicity testing for discharges of facility wastewater and facility wastewater commingled with storm water associated with industrial activity at a frequency of at least once per year.

XIII. Monitoring and Reporting

Monitoring is required by 40 CFR §122.44(i) for each pollutant limited in a permit to ensure compliance with the permit limits. The proposed general permit has the following criteria for monitoring:

- A. Samples must be collected and measurements taken at times and in a manner that is representative of the monitored discharge.
- B. All samples must be collected according to the latest edition of *Standard Methods for the Examination of Water and Wastewater* (published jointly by the American Public Health Association, the American Waterworks Association, and the Water Pollution Control Federation), the EPA's *Methods for Chemical Analysis of Water and Waste* (1979), or the EPA's *Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents* (1973).
- C. Sample containers, holding times, preservation methods, and the methods of analyses for effluent samples must meet the requirements in 40 CFR Part 136 (as amended), or be in accordance with the latest edition of *Standard Methods for the Examination of Water and Wastewater* referenced above.
- D. The permittee shall ensure that properly trained and authorized personnel monitor and sample the discharge.
- E. The sampling point must be downstream of any treatment unit or treatment technique that is used to improve or otherwise alter the quality of the discharge.
- F. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, *Environmental Testing Laboratory Accreditation and Certification*.
- G. Analytical results for determining compliance with effluent limitations must be recorded on a Discharge Monitoring Report (DMR) (EPA No. 3320-1), a TCEQ-approved self-generated form, or a copy of record, if using the eReporting function of the TCEQ eServices webpage. Effluent sampling shall be conducted in accordance with the monitoring frequencies specified in this general permit and must be submitted on a monthly or annual basis, depending on the required sampling frequency, to the TCEQ Enforcement Division (MC 224) or by eDMR through the eReporting function of the TCEQ eServices webpage. The DMR for any given month shall be due by the 20th day of the following month and must

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be signed in accordance with the requirements in Part IV.8 of the general permit. If noncompliance with a discharge limitation occurs, the permittee shall provide notification according to Part III.D.7 of the general permit.

XIV. Procedures for Final Decision

The memorandum of agreement between the EPA and TCEQ provides that EPA has no more than 90 days to comment on, object to, or make recommendations regarding the draft general permit before it is published in the Texas Register. According to 30 TAC Chapter 205, *General Permits for Waste Discharges*, when the draft general permit is proposed, notice must be published in at least one newspaper of statewide or regional circulation. Mailed notice must also be provided to the following:

- The county judge of the county or counties in which the discharges under the general permit could be located;
- If applicable, state and federal agencies for which notice is required in 40 CFR §124.10(c);
- Persons on a relevant mailing list kept under 30 TAC §39.407, *Mailing Lists*; and
- Any other person the executive director or chief clerk may elect to include.

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

Any person, agency, or association may make a request to the executive director for a public meeting on the proposed general permit before the end of the public comment period. The purpose of a public meeting is to allow the public to make verbal comments and is not a contested case proceeding under the Title 10 Texas Government Code Chapter 2001, *Administrative Procedure Act*. A public meeting will be granted when the executive director or commission determines, based on the requests received, that a significant degree of public interest in the draft general permit exists. The executive director may call and conduct public meetings in response to public comment.

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

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XV. Administrative Record

The following section is a list of the fact sheet citations of applicable statutory or regulatory provisions and appropriate supporting references.

A. Permits

1. TPDES General Permit for Discharges from Ready-Mixed Concrete Plants, Concrete Products Plants, and Their Associated Facilities (TXG110000) issued November 7, 2006.
2. TPDES Multi-Sector Industrial Storm Water General Permit (TXR050000) issued August 14, 2006, and the current proposed renewal.

B. Texas Water Code

C. Clean Water Act

D. Code of Federal Regulations

40 CFR Parts 122, 124, and 136

E. TCEQ Rules.

30 TAC Chapters 25, 39, 205, 213, 305, 307, 311, 319, and 331.

F. Communication

Interoffice memorandum dated May 24, 2010 from the Water Quality Standards Implementation Team to the Wastewater Permitting Section.

Approval letter with comments dated May 3, 2011 from the United States Environmental Protection Agency to the Wastewater Permitting Section.

G. Miscellaneous

1. Quality Criteria for Water (1986), EPA 440/5-86-001, 5/1/86.
2. *The State of Texas Water Quality Inventory*, 13th Edition, Publication No. SFR-50, Texas Natural Resource Conservation Commission, December 1996.
3. *Texas Surface Water Quality Standards*, 30 TAC §§307.1 - 307.10 (21 TexReg 9765, 4/30/2000).
4. *Procedures to Implementation of the Texas Surface Water Quality Standards*, Texas Natural Resource Conservation Commission, August 2003.
5. *TNRCC Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits*, TNRCC Document No. 98-001.000-OWR-WQ, May 1998.
6. *Standard Methods for the Examination of Water and Wastewater* – published jointly by the American Public Health Association, the

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American Waterworks Association, and the Water Pollution Control Federation, 1971

7. *Methods for Chemical Analysis of Water and Wastes* – EPA, No. 600/479020, 1979
8. *Biological Field Laboratory Methods for Measuring the Quality of Surface Waters and Effluents* – EPA, No. 670/4-73-001, July 1973