

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 30, 2009

Mr. Michael G Morrison, P.E. BCEE
Freese and Nichols Inc.
10814 Jollyville Road
Building 4, Suite 100
Austin, Texas 78759

Re: Reclaimed Water Authorization
City of Wichita Falls
Texas Commission on Environmental Quality (TCEQ) Permit No. WQ0010509-001
Authorization No. R10509-001
RN10611275; CN600129316
Wichita County, Texas

Dear Mr. Morrison:

We have completed our review of information on the above referenced project. The project under review consists of the reuse of wastewater effluent from the City of Wichita Falls River Road Wastewater Treatment Plant (TCEQ Permit No. 10509-001). The treated effluent will be used for both Type I and Type II uses.

Our review showed that the material generally meets the applicable minimum standards as set forth in the Texas Commission on Environmental Quality's rules titled Use of Reclaimed Water. The project is approved. The attachment to this letter indicates the approved site and conditions that apply to this approval.

If you have any questions or wish to amend the authorization, please contact Mr. Louis C. Herrin, III, P.E. at (512) 239-4552.

Sincerely,

A handwritten signature in cursive script, appearing to read "Chris Linendoll".

Chris Linendoll, Manager
Wastewater Permitting Section
Water Quality Division

cc: TCEQ, Region 3 Office, w/attachments



Authorization No. R10509-001

AUTHORIZATION FOR RECLAIMED WATER

Producer: City of Wichita Falls
P.O. Box 1431
Wichita Falls, Texas 76307

Provider: City of Wichita Falls
P.O. Box 1431
Wichita Falls, Texas 76307

User: The Permittee that the city permitted as user of the reclaimed water.

Location: The City of Wichita Falls River Road Wastewater Treatment Facility is located immediately south of River Road and approximately 1000 feet northeast of the intersection of River Road and Rosewood Street in the city of Wichita Falls in Wichita County, Texas.

Authorization: Type I and type II reclaimed water from the River Road Wastewater Treatment Facility (TPDES Permit No. WQ00010509001) to be used for Type I irrigation sport complexes, athletic fields, school yards, parks, hospitals grounds, industrial centers, apartment complexes, commercial, industrial manufactures, residential, properties, food crops, pasture land for milking animal, roadway right-of-ways; fire protections; maintenance of off channel impoundments (where activities such as wading or fishing are anticipated); and toilet and urinal flush water and for Type II irrigation of golf courses and pasture land for non-milking animals; road construction; construction activities; dust control; industrial, commercial, and manufacturing process water; and uses at government and military facilities. The service area is as shown in Attachment A.

This authorization contains the conditions that apply for the uses of the reclaimed water. The approval of a reclaimed water use project under Chapter 210 does not affect any existing water rights. If applicable, a reclaimed water use authorization in no way affects the need of a producer, provider and/or user to obtain a separate water right authorization from the commission. This authorization does not allow irrigation of any area authorized for irrigation under any other permit issued by Texas Commission on Environmental Quality.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality.

Issued Date: April 30, 2009


Mark Vickery, Executive Director

The authorization is subject to the following requirements:

I. General Requirements

- (a) No producer or provider may begin transferring reclaimed water to a user without first notifying the commission.
- (b) Reuse of untreated wastewater is prohibited.
- (c) Food crops that may be consumed raw by humans must not be spray irrigated. Food crops including orchard crops that will be substantially processed prior to human consumption may be spray irrigated. Other types of irrigation that avoid contact of reclaimed water with edible portions of food crops are acceptable.
- (d) There must be no nuisance conditions resulting from the distribution, the use, and/or storage of reclaimed water.
- (e) Reclaimed water must not be used in a way that degrades groundwater quality to a degree adversely affecting its actual or potential uses.
- (f) Reclaimed water stored in ponds must be prevented from discharging into waters in the state, except for discharges directly resulting from rainfall events, in accordance with a permit issued by the commission, or as authorized under City of Wichita Falls River Road Wastewater Treatment Facility (TPDES Permit No. WQ00010509001). All other discharges are unauthorized. If any unauthorized overflow of a holding pond occurs causing discharge into or adjacent to waters in the state, the user or provider, as appropriate, shall report any noncompliance. A written submission of such information must be provided to the TCEQ Region 3 in Abilene and to the TCEQ Enforcement Division (MC-149) in Austin, within five (5) working days after becoming aware of the overflow. The written submission must contain a description of the noncompliance and its cause; the potential danger to human health, 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.
- (g) Unless otherwise provided in this authorization, there must be no off-site discharge, either airborne or surface runoff, of reclaimed water from the user's property except to a wastewater treatment system or wastewater treatment collection system unless the reclaimed water user applies for and obtains a permit from the commission that authorizes discharge of the water.
- (h) All reclaimed water piping must be separated from potable water piping when trenched by a distance of at least nine feet. All buried pipe must be manufactured in purple, painted purple, taped with purple metallic tape or bagged in purple. All exposed piping, hose bibs and faucets must be painted purple, designed to prevent connection to a standard water hose, and stenciled with a warning reading "NON-POTABLE WATER."

- (i) The design of any new distribution system that will convey reclaimed water to a user must require the approval of the executive director. Materials must be submitted to the executive director in accordance with the Texas Engineering Practice Act (Article 3271a, Vernon's Annotated Texas Statutes). The plans and specifications for any new distribution system constructed pursuant to this authorization must be approved pursuant to state law, and failure to secure approval before commencing construction of such works or making a transfer of reclaimed water is a violation of this authorization. Each day of a transfer is an additional violation until approval has been secured.
- (j) Nothing in this authorization modifies any requirements of the found in 30 TAC Chapter 290, *Public Drinking Water*.
- (k) A major change from a prior notification for use of reclaimed water must be approved by the executive director before it can be implemented. A major change includes:
 - (1) a change in the boundary of the approved service area not including the conversion of individual lots within a subdivision to reclaimed water use;
 - (2) the addition of a new producer;
 - (3) a major change in the intended use, such as conversion from irrigation of a golf course to residential irrigation; or
 - (4) a change from either Type I or Type II use to the other.
- (l) The reclaimed water producer, provider, and user shall maintain a current operation and maintenance plan on the sites over which they have operational control. The operation and maintenance plan must contain the following, as a minimum:
 - (1) a copy of the signed contract between the user and provider and/or a copy of the signed contract between the provider and the producer;
 - (2) a labeling and separation plan for the prevention of cross connections between reclaimed water distribution lines and potable water lines;
 - (3) the measures that will be implemented to prevent unauthorized access to reclaimed water facilities (e.g., secured valves);
 - (4) procedures for monitoring reclaimed water;
 - (5) a plan for how reclaimed water use will be scheduled to minimize the risk of inadvertent human exposure;
 - (6) schedules for routine maintenance;
 - (7) a plan for worker training and safety; and

- (8) contingency plan for system failure or upsets.
- (m) One of the following requirements must be met by the user or provider, for any area where reclaimed water is stored or where there are hose bibs or faucets:
 - (1) Signs having a minimum size of eight inches by eight inches must be posted at all storage areas and on all hose bibs and faucets reading, in both English and Spanish, "Reclaimed Water, Do Not Drink" or similar warning.
 - (2) The area must be secured to prevent access by the public.
- (n) Where a reclaimed water line parallels a sewer line, the reclaimed water line must be constructed in accordance with subsection (p) or (q) of this section. The horizontal separation distance must be three feet (outside to outside) with the reclaimed water line at the level of or above the sewer line. Reclaimed water lines that parallel sewer lines may be placed in the same benched trench. Where a reclaimed water line crosses a sewer line, the requirement of 30 TAC §290.44(e)(5)(B), *Location of Water Lines*, must be followed with the reclaimed water line substituted for the sewer line.
- (o) Reclaimed water lines that transport reclaimed water under pressure must be sized according to acceptable engineering practices for the needs of the reclaimed water users. The provider shall prevent high velocity scouring and maintain adequate fluid velocity to prevent the deposition of solids in the lines. Pipe specified for reclaimed water force mains must have an expected life of at least as long as that of the associated lift station and must be suitable for the reclaimed water being pumped and operating pressure to which it will be subjected. All pipe must be identified in the technical specifications with appropriate American Society for Testing and Materials, American National Standard Institute, or American Water Works Association standard numbers for both quality control (dimensions, tolerance, and installation such as bedding or backfill). All pipes and fittings must have a minimum working pressure rating of 150 pounds per square inch. Final plans and specifications must describe required pressure testing for all installed reclaimed water force mains. Minimum test pressure must be 1.5 times the maximum design pressure. Allowable leakage rates must be determined as described in 30 TAC §217.97, *Pressure Sewer Systems*.
- (p) Gravity flow reclaimed water lines must meet the requirements of 30 TAC Chapter 217, Subchapter C, *Conventional Collection Systems*. The provider shall prevent high velocity scouring and maintain adequate fluid velocity to prevent the deposition of solids in the lines.
- (q) All exposed piping and piping within a building must be either purple pipe or painted purple. All exposed piping should be stenciled in white with a warning reading "NON-POTABLE WATER." All exposed or buried reclaimed water piping constructed at a wastewater treatment facility is exempt from the color-coding requirement of this section.
- (r) When applicable, in accordance with 30 TAC Chapter 217, *Design Criteria for Domestic Wastewater Systems*, the design of the distribution systems that will convey reclaimed water to a user must be submitted to the executive director and must receive an approval before the distribution system may be constructed. The design of the distribution systems must meet the

criteria of 30 TAC Chapter 217, *Design Criteria for Domestic Wastewater Systems*. When a municipality is the plan review authority for certain sewer systems that transport primarily domestic waste, in lieu of the commission, design submittal will not be subject to submittal to the commission and instead must be approved by the municipality.

- (s) All ground level and elevated storage tanks must be designed, installed, and constructed in accordance with current AWWA standards with reference to materials to be used and construction practices to be followed, except for health-based standards strictly related to potable water storage and contact practices, where appropriately less restrictive standards may be applied.

II. Storage Requirements for Reclaimed Water

- (a) Storage facilities for retaining reclaimed water prior to use must not be located within a floodway and must be protected from a 100-year flood.
 - (1) Any holding pond designed to contain Type I effluent must have a lining with a permeability of no more than 1×10^{-4} cm/sec and conform to the following requirements:
 - (A) The ponds must be designed and constructed to prevent groundwater contamination;
 - (B) Soils used for pond lining must be free from foreign material such as paper, brush, trees, and large rocks; and
 - (C) All soil liners must be of compacted material, at least 24 inches thick, compacted in lifts no greater than 6 inches thick and compacted to 95% of Standard Proctor Density. In-situ clay soils meeting the soils liner requirements must be excavated and re-compacted a minimum of 6 inches below planned grade to assure a uniformly compacted finished surface.
 - (D) Soil liners must meet the following particle size gradation and Atterburg limits:
 - (i) 30% or more passing a number 200 mesh sieve; and
 - (ii) a liquid limit of 30% or greater; and a plasticity index of 15 or greater and have a permeability less than or equal to 1×10^{-4} cm/sec;
 - (E) Synthetic membrane linings must have a minimum thickness of 40 mils with a leak detection system. In situ liners at least 24 inches thick meeting a permeability less than or equal to 1×10^{-4} cm/sec are acceptable alternatives;

- (F) Certification by a Texas licensed professional engineer must be furnished that the pond lining meets the appropriate criteria prior to utilization of the facilities;
 - (G) Soil embankment walls must have a top width of at least five feet. The interior and exterior slopes of soil embankment walls must be no steeper than one foot vertical to three feet horizontal unless alternate methods of slope stabilization are utilized. All soil embankment walls must be protected by a vegetative cover or other stabilizing material to prevent erosion. Erosion stops and water seals must be installed on all piping penetrating the embankments;
 - (H) An alternative method of pond lining that provides equivalent or better water quality protection than provided under this section may be utilized with the prior approval of the executive director.
- (2) Any holding pond designed to contain Type II effluent must have a lining with a permeability of no more than 1×10^{-7} cm/sec and conform to the following requirements:
- (A) The ponds must be designed and constructed to prevent groundwater contamination;
 - (B) Soils used for pond lining must be free from foreign material such as paper, brush, trees, and large rocks; and
 - (C) All soil liners must be of compacted material, at least 24 inches thick, compacted in lifts no greater than 6 inches thick and compacted to 95% of Standard Proctor Density. In-situ clay soils meeting the soils liner requirements must be excavated and re-compacted a minimum of 6 inches below planned grade to assure a uniformly compacted finished surface.
 - (D) Soil liners must meet the following particle size gradation and Atterburg limits:
 - (i) 30% or more passing a number 200 mesh sieve; and
 - (ii) a liquid limit of 30% or greater, and a plasticity index of 15 or greater and have a permeability less than or equal to 1×10^{-7} cm/sec;
 - (E) Synthetic membrane linings must have a minimum thickness of 40 mils with a leak detection system. In situ liners at least 24 inches thick meeting a permeability less than or equal to 1×10^{-7} cm/sec are acceptable alternatives;
 - (F) Certification by a Texas licensed professional engineer must be furnished that the pond lining meets the appropriate criteria prior to utilization of the facilities;

- (G) Soil embankment walls must have a top width of at least five feet. The interior and exterior slopes of soil embankment walls must be no steeper than one foot vertical to three feet horizontal unless alternate methods of slope stabilization are utilized. All soil embankment walls must be protected by a vegetative cover or other stabilizing material to prevent erosion. Erosion stops and water seals must be installed on all piping penetrating the embankments;
- (H) An alternative method of pond lining that provides equivalent or better water quality protection than provided under this section may be utilized with the prior approval of the executive director
- (3) Reclaimed water may be stored in leak-proof, fabricated tanks.
- (4) Subsequent holding ponds utilized for the receipt and storage of reclaimed water of a quality that could cause or causes a violation of a surface water quality standard or impairment of groundwater for its actual or intended use will be also subject to the storage requirements of this section.

III. Specific Uses and Quality Standards for Reclaimed Water

- (a) Numerical parameter limits pertaining to specific reclaimed water use categories are contained in this section. These limits apply to reclaimed water before discharge to initial holding ponds or a reclaimed water distribution system.
- (b) The reclaimed water producer shall establish that the reclaimed water meets the quality limits at the sample point for the intended use in accordance with the monitoring requirements identified in Section IV, *Sampling and Analysis*.
- (c) **Type I Reclaimed Water Use.** The type of use is that where the public may come in contact with the reclaimed water. The uses allowed by this authorization are Type 1 irrigation sport complexes, athletic fields, school yards, parks, hospitals grounds, industrial centers, apartment complexes, commercial, industrial manufactures, residential, properties, food crops, pasture land for milking animal, roadway right-of-ways; fire protections; maintenance of off channel impoundments (where activities such as wading or fishing are anticipated); and toilet and urinal flush water.
- (d) The following conditions apply to Type I use of reclaimed water. At a minimum, the reclaimed water producer shall transfer only reclaimed water of the following quality as described for Type I reclaimed water use. Type I reclaimed water on a 30-day average must have a quality of no more than:

CBOD ₅	5 mg/l (30-day daily average)
Turbidity	3 NTU (30-day daily average)
Fecal Coliform or <i>E. coli</i> Bacteria	20 CFU/100 ml (geometric mean)
Fecal Coliform or <i>E. coli</i> Bacteria	75 CFU/100 ml (single grab sample)

- (e) Type II Reclaimed Water Use. The type of use is that where the public may not come in contact with the reclaimed water. The uses allowed by this authorization and for Type II irrigation of golf courses and pasture land for non-milking animals; road construction; construction activities; dust control; industrial, commercial, and manufacturing process water; and uses at government and military facilities.
- (f) The following conditions apply to Type II use of reclaimed water. At a minimum, the reclaimed water producer shall transfer only reclaimed water of the following quality as described for Type I reclaimed water use. Type I reclaimed water on a 30-day average must have a quality of no more than:

CBOD ₅	15 mg/l (30-day daily average)
Fecal Coliform or <i>E. coli</i> Bacteria	200 CFU/100 ml (geometric mean)
Fecal Coliform or <i>E. coli</i> Bacteria	800 CFU/100 ml (single grab sample)

IV. Sampling and Analysis

- (a) The reclaimed water producer shall sample the reclaimed water prior to distribution to user to assure that the water quality is in accord with the intended contracted use.
- (b) Analytical methods must be in accord with those specified in 30 TAC Chapter 319, *Monitoring and Reporting*. Test procedures for the analysis of pollutants must comply with procedures specified in 30 TAC §§319.11 - 319.12. Measurements, tests, and calculations must accurately represent the reclaimed water. All laboratory tests submitted to demonstrate compliance with this authorization must meet the requirements of 30 TAC Chapter 25, *Environmental Testing Laboratory Accreditation and Certification*.
- (c) The minimum sampling and analysis frequency for Type I reclaimed water is twice per week and for Type II is once per week.
- (d) The monitoring must be done after the final treatment unit.
- (e) The records of the monitoring must be done on a monthly basis and be available at the facility site for inspection by representatives of the Commission.

V. Record Keeping and Reporting

- (a) The reclaimed water provider and user shall maintain records on site for a period of at least five years.
 - (1) Records to be maintained by the provider include:

- (A) copies of notifications made to the commission concerning reclaimed water projects;
 - (B) as applicable, copies of contracts made with each reclaimed water user (this requirement does not include reclaimed water users at residences that have separate distribution lines for potable water);
 - (C) records of volume of water delivered to each reclaimed water user per delivery (this requirement does not apply to reclaimed water users at residences that have separate distribution lines for potable water); and
 - (D) reclaimed water quality analyses.
- (2) The reclaimed water provider or producer shall report on a monthly basis the following information on form TCR-1. Such reports are due to the commission by the reporting period.
- (A) volume of reclaimed water delivered
 - (B) quality of reclaimed water delivered, monthly average for each quality criterion that must be reported as individual
- (b) The provider shall provide written notice to the Water and the appropriate TCEQ regional office at least 10 days before the reclaimed water is transferred.
- (c) Monitoring requirements contained in the authorization are suspended from the effective date of the authorization until the reclaimed water is transferred.

VI. Transfer of Reclaimed Water

- (a) Reclaimed water transferred from a provider to a user must be done on a demand only basis. A reclaimed water user may refuse delivery of such water at any time.
- (b) All reclaimed water transferred to a user must be of at least the treatment quality specified in Section IV, *Sampling and Analysis*.
- (c) Transfer must be accomplished via pipes or tank trucks.
- (d) The transfer of reclaimed water must be terminated immediately if a provider becomes aware of the misuse of the reclaimed water by the user, regardless of contract provisions.

VII. Restrictions

- (a) This authorization does not convey any property right and does not grant any exclusive privilege.
- (b) This authorization does not allow the use of reclaimed water on a land that is authorized as a disposal site under either a Texas Discharge Pollutant Elimination System (TPDES) permit or a Texas Land Application Permit (TLAP).

VIII. Responsibilities and Contracts

- (a) The producer of reclaimed water will not be liable for misapplication of reclaimed water by users, except as provided in this section. Both the reclaimed water provider and user have, but are not limited to, the following responsibilities:
 - (1) The reclaimed water producer shall:
 - (A) transfer reclaimed water of at least the minimum quality required by this chapter at the point of delivery to the user for the specified use;
 - (B) sample and analyze the reclaimed water and report such analyses in accordance with Section IV, *Sampling and Analysis*, and Section V, *Record keeping and Reporting*; and
 - (C) notify the executive director in writing within five (5) days after obtaining knowledge of reclaimed water use not authorized by the executive director's reclaimed water use approval.
 - (2) The reclaimed water provider shall:
 - (A) assure construction of reclaimed water distribution lines/systems in accordance with 30 TAC Chapter 217, *Design of Domestic Wastewater Systems*, and in accordance with approved plans and specifications;
 - (B) transfer reclaimed water of at least the minimum quality required by this chapter at the point of delivery to the user for the specified use;
 - (C) notify the executive director in writing within five (5) days after obtaining knowledge of reclaimed water use not authorized by the executive director's reclaimed water use approval; and
 - (D) not be found in violation of this chapter for the misuse of the reclaimed water by the user if transfer of such water is shut off promptly upon knowledge of misuse regardless of contract provisions.
 - (3) The reclaimed water user shall:

- (A) use the reclaimed water in accordance with this authorization; and
- (B) maintain and provide records as required by Section III, *Record Keeping and Reporting*.

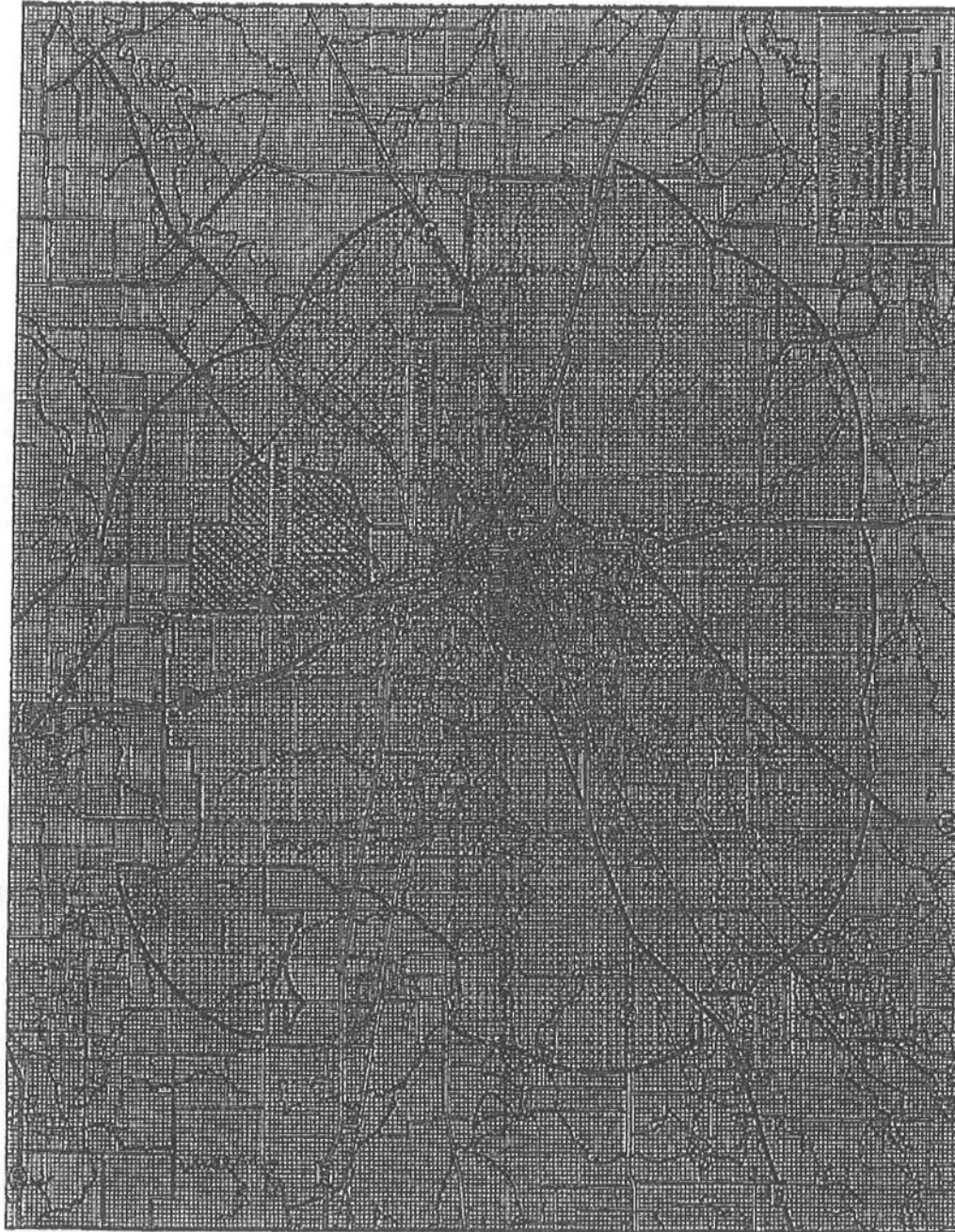
IX. Enforcement

If the producer, provider and/or user fail to comply with the terms of this authorization, the executive director may take enforcement action provided by the Texas Water Code §26.019 and §26.136.

X. Standard Provisions

- (a) This authorization is granted in accordance with the rules and orders of the commission and the laws of the state of Texas.
- (b) Acceptance of this authorization constitutes an acknowledgment and agreement that the provider and user will comply with all the terms, provisions, conditions, limitations and restrictions embodied in this authorization and with the rules and other orders of the commission and the laws of the state of Texas. Agreement is a condition precedent to the granting of this authorization.

Attachment A



The Wichita Falls Pretreatment Program

Who We Are:

The Wichita Falls Pretreatment Program is an EPA-mandated program required of all Publically Owned Treatment Works (POTWs). The Texas Pollutant Discharge Elimination System (TPDES) permits issued to the City's wastewater plants require Wichita Falls to have a Pretreatment Program.

The Pretreatment Program sets certain restrictions and limitations on all dischargers of non-residential wastewater to the City wastewater treatment system (or POTW). As a result, certain Significant industries, commercial establishments, and/or institutions may be required to "pre-treat" their wastewater before it is discharged to the City treatment system. Besides having to meet local ordinance requirements certain Categories of industries have to meet requirements set forth in State and Federal regulations. The Wichita Falls Pretreatment Program is responsible for enforcing those State and Federal requirements.

Why We Are:

The Purpose of the Pretreatment Program is five-fold:

1. To protect the water quality of the Wichita River by preventing pass-through of pollutants through the POTW into the environment.
2. To ensure the continued functioning of the POTW by preventing interference of its biological processes by pollutants.
3. To prevent the contamination of the sludge produced by the POTW that would limit disposal alternatives and greatly increase sludge disposal costs.
4. To protect the public and City personnel from pollutants in the sewer lines that could produce adverse health effects.
5. To protect the POTW and other public and private property from damage caused by discharged pollutants.

How We Came To Be:

On June 22, 1969, the Cuyahoga River in Cleveland Ohio caught fire due to wastewater discharged by Industries. The incident made the cover of Time Magazine. As a result Congress passed The Clean Water Act of 1972. The Act established the National Pollutant Discharge Elimination System (NPDES), which required permits for all facilities which discharged into the navigatable waters of the United States. This included municipal wastewater treatment plants as well as industries. However, to circumvent the requirement of an NPDES permit, many industries stopped discharging into rivers and began discharging their wastes into municipal wastewater plants. The results were often expensive to the municipality and sometimes catastrophic to the community.

For example, on March 17, 1977, employees at the Morris Forman Wastewater Treatment Plant in Louisville Kentucky became sick because of a strong, chemical odor. After investigation it was determined that a local industry was discharging extremely toxic chemicals into the sewer lines. It took three months to clean up the plant and two years to clean up the sewer lines. During that time the raw sewage of the Louisville area had to be discharged directly into the river. Beside millions of dollars of fines and reparations, the president of the responsible company was sent to Federal prison for two years.

As a result of this and other such incidents Congress modified the Clean Water Act to require Pretreatment Programs for all POTWs. (For some POTWs, such as very small ones, the Pretreatment Program is directly enforced and administered by the State or the regional EPA instead of the local government.)

On June 6, 1980, the City of Wichita Falls established the position of Pollution Control Officer and tasked him with the responsibility of developing a Pretreatment Program by 1983.

On April 3, 1981, the Pollution Control Officer began an investigation into an unauthorized industrial discharge into Plum Creek. During the course of the investigation the Texas Water Commission (now the Texas Commission of Environmental Quality) expressed concern regarding potential enforcement problems caused by the overlap of responsibility between the Air and Water Pollution Division of the Health Department and the Pretreatment Program of the Wastewater Treatment Department. As a result, City Manager Stuart A. Bach transferred the Pretreatment Program to the Air and Water Pollution Division of the Health Department.

On November 15, 1983, the United States Environmental Protection Agency approved the Wichita Falls Pretreatment Program. The program was substantially modified October 1993, and December 2002. Since the establishment of the Pretreatment Program in 1983 pollutants entering the River Road POTW have decreased by 97%. (See table below.)

In January of 1985, the Pretreatment Program developed and implemented regulations for the pick-up, transportation and/or discharge of liquid waste (such as from grease interceptors, septic tanks, and portable toilets) within the city limits of Wichita Falls.

In August of 2004 the Pretreatment Program developed and implemented regulations for grease interceptor requirements for food preparation facilities discharging into the POTW. Since the implementation of the regulations City sewer overflows into the environment have been reduced by 50%. The City's grease interceptor ordinance is the most comprehensive in the State of Texas and most of the United States. The City often receives calls from other municipalities throughout the nation for advice in implementing their own grease interceptor program.

Industries currently under permit:

Categorical Industrial Users (CIUs):

These are industries in categories that are specifically regulated by the EPA. The City is required by Federal and State law to permit them.

1. Howmet Corporation (Metal Finishing Category)
2. Liquid Waste Processing (Centralized Waste Treatment Category)
3. Signal Hill (Steam Electric Power Generating Category)
4. P&WC Component Repairs (Metal Finishing Category)
5. Tranter Inc. (Metal Finishing Category)

Categorical Industries have to be tested at least once every six months for up to 129 Priority Pollutants regulated by the EPA.

Significant Industrial Users (SIUs).

A Significant Industrial User is any industry that is:

- A. A Categorical Industrial User
- B. An industry that discharges an average of 25,000 gallons per day (GPD) to the POTW.

C. An industry whose discharge makes up five percent or more of the capacity of a POTW.

or

D. An industry designated as such by the City on the basis that it has a reasonable potential for adversely affecting the operation of the POTW or for violating any pretreatment standard or requirement.

Besides the CIUs listed above, Significant Industrial Users permitted by the City are:

1. Admiral Linen Services
2. PPG
3. Sheppard Air Force Base – Discharge to Northside Plant
4. Sheppard Air Force Base – Discharge to River Road Plant

Significant Industrial Users (SIUs) are required to test once every six months for the pollutants listed in the local ordinance unless the Control Authority justifies otherwise. They also must sample for any other pollutants of concern as well.

Note: Federal regulations require SIUs to be sampled at least once every six months. Regulations specify that this sampling may be done either by the industry or by the Control Authority. If the industry does the sampling then the Control Authority is required to sample once a year to verify the industry's self monitoring.

To insure a representative sample the City requires industrial self-monitoring to consist of three consecutive days.

Additionally the Control Authority is required to sample the influent (in-flow) and the effluent (out-flow) of the POTWs for EPA's 129 Priority Pollutants. The River Road POTW is required to be sampled twice a year, the smaller Northside POTW is only required to be sampled once a year. It must also sample the influent and the effluent of the POTWs for the 12 Priority Pollutant Metals, Phenols, and Cyanide. (The River Road POTW four times a year, the Northside twice.) The sludge of both POTWs is also sampled for TCLP (Toxicity Characteristic Leaching Procedure), PCB (Poly-Chlorinated Biphenyls), and Priority Pollutant pesticides once a year.

The Control Authority must also sample the influent and effluent of the POTWs for the toxic materials listed in Table 1 of 30 TAC 307.6(c)(1). (River Road twice a year, the Northside once.)

The data from the POTW sampling is used to determine if the Technically Based Local Limits (TBLLs) listed in the local ordinance are still adequate. It is also used to see how well the Pretreatment Program is functioning.

Influent measurements at River Road POTW in mg/l

	Early 1980s	Latest Averages	Percentage Decrease
Antimony	0.16	< 0.001	99.3%
Arsenic	0.1	< 0.001	99%
Beryllium	0.02	< 0.001	95%
Cadmium	0.3	0.0012	99.6%
Chromium	0.56	0.0578	90%
Copper	0.936	0.054	96%
Cyanide	0.34	< 0.01	97%
Lead	0.60	0.0127	97%
Mercury	0.0013	0.00057	56%
Nickel	0.45	0.0153	97%
Phenols	0.43	0.0817	80%
Selenium	0.3	< 0.001	99%
Silver	0.06	0.0052	91%
Zinc	9.912	0.0925	99%

Conclusion:

As can be seen, the Pretreatment Program of Wichita Falls is an excellent example of an effective and successful government program. Our success would not be possible without the stalwart support of past and present City Managers and City Councils. But a very large part of our success is due to the sincere cooperation of our local industries and their dedicated commitment to helping us preserve the environment. Throughout the length of the three decades of the program's existence, our relationship with local industry has been cooperative, not adversarial, and therein is the key to the program's success.



BIGGS & MATHEWS, INC.
Consulting Engineers

August 5, 2013

Joel Klumpp, Team Leader
Technical Review & Oversight Team MC-159
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

RE: City of Wichita Falls
PWS ID No. 2430001
Temporary Direct Potable Reuse Project
Supplemental Response to TCEQ Pretreatment Comments

Dear Mr. Klumpp:

As part of our conference call on August 1, 2013 the Texas Commission on Environmental Quality (TCEQ) provided and discussed with us their comments on the City of Wichita Falls Pretreatment Program document that was previously submitted on July 29, 2013. Based on conference call discussions, we have attached the revised Pretreatment Program Document for your review.

In addition, we have attached a PDF showing "shaded in yellow" the portions of the document that were modified and have sent by "Regular Mail" three (3) hardcopies to TCEQ in Austin and one (1) hardcopy to Region 8 in San Angelo.

TCEQ COMMENTS:

In order to increase the measures in place to protect the supply of drinking water, human health, and the environment, the TCEQ recommends that the City of Wichita Falls take the following actions.

- *Do not accept hauled waste at the River Road Wastewater Treatment Facility (WWTF) during the operation of the temporary direct portable reuse facility.*

Response: The City agrees and will divert all waste haulers to the City's Northside WWTP during the operational period of the DPR Project.

- *Do not accept Underground Storage Tank (UST) clean up waste at the River Road WWTF during the operation of the temporary direct portable reuse facility*

Response: The City has never accepted UST waste and we do not intend to change this practice.

- *Do not accept waste streams from the Liquid Waste Processing facility at the River Road WWTF during the operation of the temporary direct potable reuse facility.*
 - *If liquid waste processing waste must be accepted, please provide a procedure of how the WWTF will assure that there will be no impact of the waste on the operation of the WWTF and the quality of the WWTF effluent. Require any Centralized Waste Treatment (CWT) facility to perform a comprehensive evaluation of each wastestream source for existing wastestreams and evaluate how such wastestreams impact the CWT's treatment process and its ability to comply with local limits. Require the CWT to inform the city of the results of the evaluation and obtain written approval from the city prior to accepting the wastestream. The city should verify the categorical determination of Liquid Waste Processing and revise the industrial discharge permit as necessary to reflect accurate categorization, effluent permit limit limits, and other conditions or requirements. The city needs to pay close attention to the definition of CWT wastewater and CWT wastewater sources.*

Response: The city currently has only one Liquid Waste Processing (LWP) facility that contributes flow to the POTW. The facility has recently undergone an upgrade of all their equipment, added new flow monitors, re-plumbed most of their facility, and added safe guards to prevent untreated waste from escaping the facility. These improvements have given the owners much better control over their processes. The City also requires the company to submit a copy of all manifests of every load of waste delivered to their facility. This information gives the City a better idea as to the volume and type a wastes entering the facility. The facility processes mainly grease trap waste. We have also increased their sampling requirement for BOD from once every 6 months to once per month. The City has also recently required the facility to sample and test for FOG twice per month.

At this point the City has a good handle on the operations of the facility. The facility is located approximately 4 miles from the POTW and the discharge from the facility is significantly diluted, equalized, and stabilized with other wastewater flow prior to it entering the POTW.

Even through the City feels that we have a good handle on the operations occurring at the LWP facility, the City will increase informal inspections of the facility to once per month during the verification testing and the full scale operations of the DPR project.

- *Do not allow new users to discharge to River Road WWTF during the operation of the temporary direct potable reuse facility.*

Response: All new industrial development is required to complete a Baseline Monitoring Report of their wastewater so that the industry can inform the City as to the constituents of their potential waste stream. The base line results are compared to the City's TBLLs. For all contaminates that exceed any TBLL, the City will require the industry to install pretreatment facilities on site to remove these contaminates to levels

below the TBL. If compliance cannot be demonstrated then the industry would not be allowed to discharge to the POTW. Any potential industrial flow which may have a potentially negative impact on the City's ability to utilize the DRP project will not be allowed. The City feels this is adequate to ensure any potential new waste streams will not interfere with the DRP project. The city is committed to protecting the wastewater effluent and will take all actions necessary to protect this new raw water supply.

- *Do not allow Significant Industrial Users (SIUs) to substantially increase the volume or change the characteristic of their discharges to the River Road WWTF.*

Response: All industries in the pretreatment program are required to inform the city of any substantial changes in flow volumes, manufacturing process, or changes in pretreatment practices 30 days in advance of making these changes. Notification is a requirement of the Code of Federal Regulations (CFR), City Ordinance, and the City's Industrial User Permit. Upon submission of the proposed changes the City has the authority to deny, modify, or allow the changes.

- *Reassess the TBLs before the beginning of the diversion of the effluent to be used as a supply source for the drinking water plant.*

Response: The current TBLs were established 2002 when the City actually had several other very large industries contributing flow to the POTW. When the TBLs were established there was a 10% factor of safety built into the limits. With the closure of 4 Categorical metal finishers, and 2 Significant Users since 2002, there is an even greater factor of safety built into the TBL's at this point. The TBL's were reassessed with each WWTP permit renewal which occurred in 2006 and again in 2011, therefore the City does not plan to reassess or change the current TBLs.

All constituents in the treated effluent are currently well below MCL for drinking water, therefore the City is confident the TBLs are adequate.

- *Perform a comprehensive investigation of the Sheppard Air Force Base (SAFB) to identify all the waste streams in each building including those operated by any tenants located at SAFB. Please pay close attention to any medical operations. Coordinate the investigation with Mr. Eric Agnew of TCEQ's Region 4 Office. Please provide an inspection report to TCEQ that includes all the waste streams in each building that discharge and how each waste stream is or will be managed before the end of the full scale verification study.*

Response: Ms. Pixie Whitmore from the TCEQ's Region 4 office accompanied City staff during an inspection on February 13, 2012. An annual inspection of SAFB was performed in November of 2012 and an informal inspection was performed in December 2012. The next annual inspection will occur in November of 2013, just prior to the DRP verification testing. The Base was found to be in compliance during these inspections

The base has a long standing history of compliance with the City's pretreatment program. Also SAFB has no industrial processes that are regulated under 40 CFR. It should also be noted that flow from the medical clinic on the base is treated at the City's Northside WWTP.

The City makes annual and periodic informal inspections of the base and is well informed of the practices occurring on the base. We have a great working relationship with the Base Civil Engineer, Mr. Mark McBurnett, who is also a member of the City's Water Resources Commission. Mr. McBurnett oversees the pretreatment program on the base and is well aware of the City's DRP project and the implications of any potential upset caused by contributing industrial flow. The City feels that we have full comprehension of the operations of the Base as it relates to the City's pretreatment program and an investigation is unnecessary.

- *Require the facilities permitted and regulated under the Metal Finishing Point Source Category (40 CFR Part 433) to submit and implement a Toxic Organics Management Plan (TOMP) and obtain written approval from the city. The industries shall provide required certifications each month during the operation of the temporary direct portable reuse facility. The TOMP will aide to manage toxic organics and prevent their discharge to the sanitary sewer system. During the inspections of these type of industries, the city should also conduct a thorough review of chemicals used to ensure that no chemicals are being used or stored at the facilities that contain any TTOs and verify procedures stated in the TOMP are adequate and are being followed. The city needs to require the industry to make any modifications necessary in order to ensure that toxic organics will not be introduced into the sanitary sewer system. Modifications to the TOMP need to be reviewed and approved by the city before the industries make the changes to their operations.*

Response: The City only has three industries that fall into the categorical classification of a metal finisher. None of them have toxic organic chemicals on site. Each industry has a current TOMP that is reviewed by the City on an annual basis. Each facility is also inspected for the absence of any toxic organic chemicals as each industry has specified. Also every six months all Metal Finishers submit a certified statement that the TOMP is being implemented. With this TOMP plan the industries are not required to sample for TTO; however, the City samples each permitted metal finisher facility annually for TTO, as a check . At the request of the TCEQ, the next TTO sampling will be scheduled to occur during the verification testing of the DPR project.

- *Require all permitted SIUs to develop and implement a Slug Discharge Control Plan (SDCP) that includes detailed accidental spill cleanup and notification requirements. For facilities that currently have an approved SDCP, evaluate its effectiveness and require modifications as needed to ensure that slug loads will be prevented and that adequate procedures exist to respond to worst-case accidental spills and notification procedures to the city's pretreatment program and WWTF personnel if a slug discharge*

or accidental spill occurs. The city shall approve all SDCPs and revisions to them in writing.

Response: Howmet, PPG, and IMC currently have a Slug Control Plans in place. Each Slug Control Plan is reviewed during the annual inspection process by the City. Every industry permitted by the City's Pretreatment Program has a SPCC plan. The SPCC plans are evaluated during the annual inspection process.

- *Notify all permitted or regulated industrial users (IUs) of the project, and require them to notify the City of Wichita Falls of any substantial changes in the discharge volume of a regulated wastestream (e.g., an increase or decrease of 20% or greater) or other changes in characteristics of their discharge, as well as any significant changes in their manufacturing process, facility operations, or wastewater treatment process. The city shall keep documentation of notifications to each regulated IU.*

Response: In an effort to safeguard the wastewater effluent, the City will inform all industries in the pretreatment program of the pending DPR project. We will reinforce their need to comply with all pretreatment regulations and make them aware of the potential implications that changes in their process could have on the City's ability to utilize the wastewater effluent as a source water. We will also perform informal inspections of each industry on a monthly basis during the duration of the DPR Project.

- *Encourage all permitted or regulated IUs to seek ways to minimize waste, reduce use of raw materials by increasing the efficiency of their production activities (e.g., maximizing product yield and minimizing by-products), improve the efficiency of their wastewater treatment system, substitute less-toxic chemicals, and implement any other pollution prevention activities that will reduce the volume and concentration of pollutants discharged to the sanitary sewer system.*
The City's Pretreatment Program follows all rules and regulations set by the EPA and TCEQ and continuously reviews the 40 CFR throughout the year insuring that each industry in the Pretreatment Program is being regulated by the correct standards set out by the CFR.

Response: During annual facility compliance inspections, pollution prevention and waste minimization are specifically discussed during the pre-inspection interview. At this time the City inspectors pass along any information from industry associations, the EPA or the TCEQ. Additionally, users are informed that pollution prevention and waste minimization are important criteria for receiving the City's annual Certificates of Excellence in Pretreatment award. Finally, in all user permits it is noted that implementation of appropriate Best Management Practices to the maximum extent practicable and comprehensive integration of Pollution Prevention in all of its activities shall constitute evidence of Good Faith and MAY result in less stringent enforcement action than otherwise required by the City's Enforcement Response Plan.

The City's current pretreatment program consists of 5 categorical industries and 3 SIUs. The total average daily industrial flow is 0.55 MGD and is approximately 6% of the entire daily average flow being treated at the RRWWTP. The largest percentage of the industrial flow is contributed by SAFB, which is a Significant Industrial user, not a Categorical Industrial user. A large percentage of the waste from SAFB is domestic waste contributed by dorms, cafeterias, and other housing facilities with very little waste being produced from industrial process.

Also due to having so few industries in this program the City is afforded the luxury of staying very involved with each industry and staying abreast of any potential conflict, non-compliance, or other issue that could potentially arise. The City also recently created an Environmental Coordinator position to manage the pretreatment program.

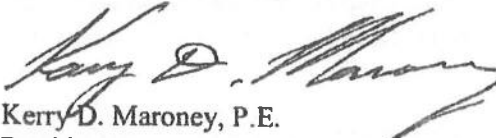
Also to reiterate, the wastewater effluent has been tested and is well below all the MCL's for drinking water which indicates that the City's Pretreatment Program is performing adequately.

As stated in bullet point #10, in an effort to safeguard the wastewater effluent, the City will inform all industries in the pretreatment program of the pending DPR project. We will reinforce their need to comply with all pretreatment regulations and make them aware of the potential implications that changes in their process could have on the City's ability to utilize the wastewater effluent as a source water. We will also perform informal inspections of each industry on a monthly basis during the duration of the DPR Project.

As you have additional questions please provide those in a timely manner for our response.

Sincerely,

BIGGS & MATHEWS, INC.



Kerry D. Maroney, P.E.

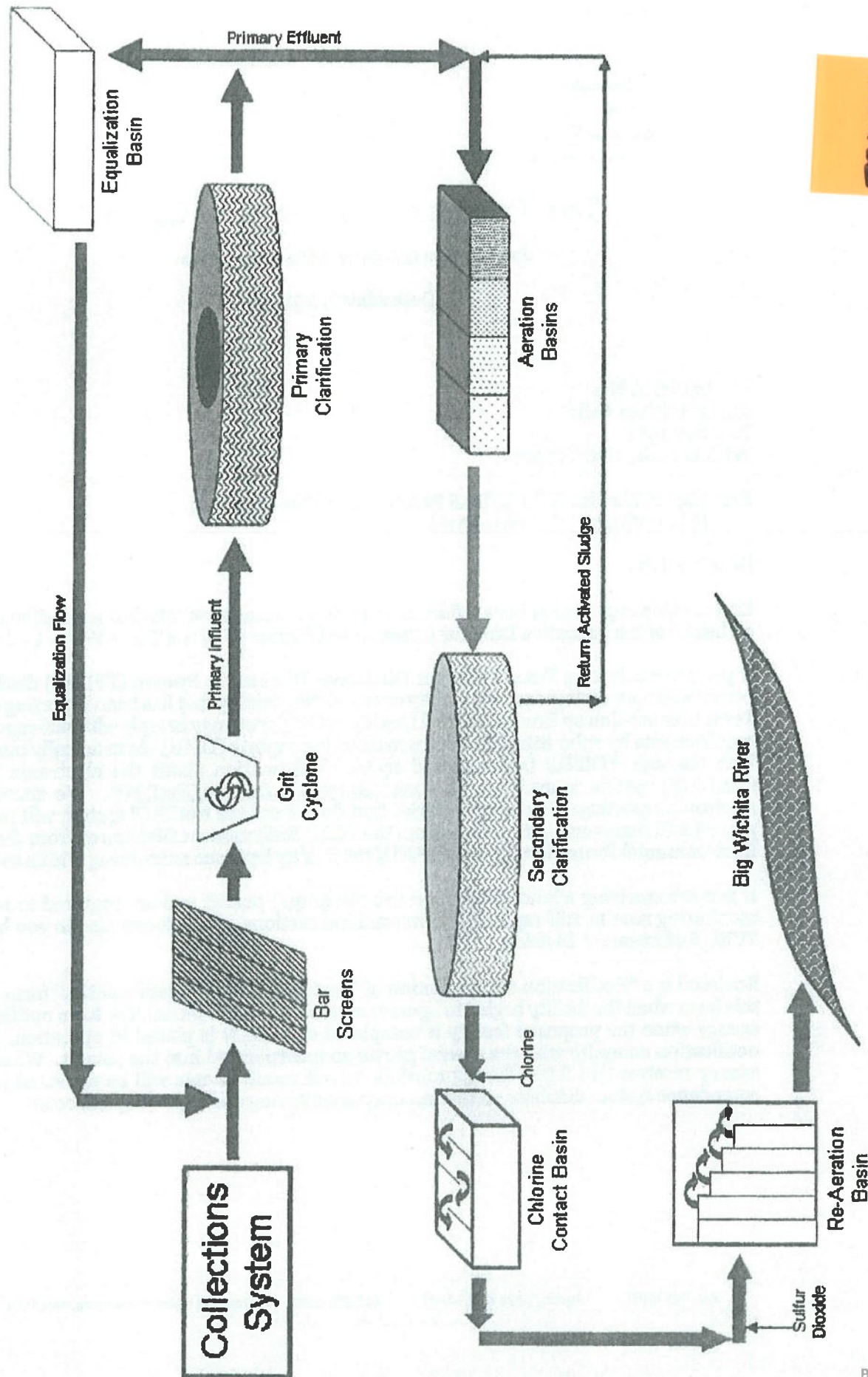
President

Cc: Russell Schreiber, P.E.
Public Works Director
City of Wichita Falls, Texas

Daniel Nix
Public Utilities Operations Manager
City of Wichita Falls, Texas

River Road Wastewater Treatment Plant (RRWWTP)

Permit ID: TX0047686



TPDES

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 7, 2010

Mr. Daniel K. Nix
City of Wichita Falls
P.O. Box 1431
Wichita Falls, Texas 76307

Re: City of Wichita Falls, TPDES Permit No. WQ0010509001
(RN101611275; CN600129316)

Dear Mr. Nix:

Enclosed is a copy of the above referenced permit for a wastewater treatment facility issued on behalf of the Executive Director pursuant to Chapter 26 of the Texas Water Code.

If you are receiving a Texas Pollutant Discharge Elimination System (TPDES) discharge permit and your system is a new facility or an existing facility that has been reporting to the Texas Commission on Environmental Quality (TCEQ), you may comply with self-reporting requirements by submitting discharge monitoring reports (DMR) electronically over the Web through STEERS (see enclosed flyer). Information about the electronic DMR (NetDMR) system is available at www.tceq.state.tx.us/goto/NetDMR. We encourage electronic reporting. Discharge facilities that do not use the NetDMR system will receive paper DMR forms and instructions from the TCEQ Enforcement Division or from the U.S. Environmental Protection Agency (EPA) if the facility has been submitting DMRs to EPA.

If you are receiving a land application (no discharge) permit and are required to report monitoring results, self-reporting forms and instructions will be forwarded to you by the TCEQ Enforcement Division.

Enclosed is a "Notification of Completion of Wastewater Treatment Facilities" form. Use this form when the facility begins to operate or goes into a new phase. The form notifies the agency when the proposed facility is completed or when it is placed in operation. This notification complies with the special provision incorporated into the permit. When the agency receives this form, the appropriate permit requirements will be activated in the compliance system database so that accurate monitoring and reporting can occur.

Mr. Daniel K. Nix
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Should you have any questions, please contact Mr. Bijaya Chalise of the TCEQ's Wastewater Permitting Section at (512) 239-4671 or if by correspondence, include MC 148 in the letterhead address at the bottom of the previous page.

Sincerely,



Charles W. Maguire, Director
Water Quality Division
Texas Commission on Environmental Quality

CWM/BC/evm

Enclosures

cc: TCEQ, Region 3

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Protecting Texas by Reducing and Preventing Pollution

December 7, 2010

Daniel K. Nix
City of Wichita Falls
P. O. Box 1431
Wichita Falls, Texas 76307

RE: City of Wichita Falls
Permit No. WQ0010509001

This letter is your notice that the Texas Commission on Environmental Quality (TCEQ) executive director (ED) has issued final approval of the above-named application. According to 30 Texas Administrative Code (TAC) Section 50.135 the approval became effective on the date the ED signed the permit or other approval. A copy of the final approval is enclosed and cites the effective date.

You may file a **motion to overturn** with the chief clerk. A motion to overturn is a request for the commission to review the TCEQ executive director's approval of the application. Any motion must explain why the commission should review the TCEQ executive director's action. According to 30 TAC Section 50.139 an action by the ED is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

A motion to overturn must be received by the chief clerk within 23 days after the date of this letter. An original and 7 copies of a motion must be filed with the chief clerk in person or by mail. The Chief Clerk's mailing address is Office of the Chief Clerk (MC 105), TCEQ, P.O. Box 13087, Austin, Texas 78711-3087. On the same day the motion is transmitted to the chief clerk, please provide copies to Robert Martinez, Environmental Law Division Director (MC 173), and Blas Coy, Public Interest Counsel (MC 103), both at the same TCEQ address listed above. If a motion is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request **judicial review** of the ED's approval. According to Texas Water Code Section 5.351 a person affected by the ED's approval must file a petition appealing the ED's approval in Travis County district court within 30 days after the effective date of the approval. Even if you request judicial review, you still must exhaust your administrative remedies, which includes filing a motion to overturn in accordance with the previous paragraphs.

Individual members of the public may seek further information by calling the TCEQ Office of Public Assistance, toll free, at 1-800-687-4040.

Sincerely,

A handwritten signature in cursive script, reading "LaDonna Castañuela".

LaDonna Castañuela
Chief Clerk

LDC/ka

cc: Blas Coy, TCEQ Public Interest Counsel (MC 103)



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

TPDES PERMIT NO. WQ0010509001
For TCEQ office use only - EPA LD. No.
TX0047686

This is a renewal that replaces TPDES
Permit No. WQ0010509001 issued May 10,
2007.

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

City of Wichita Falls

whose mailing address is

P. O. Box 1431
Wichita Falls, Texas 76307

is authorized to treat and discharge wastes from the River Road Wastewater Treatment Facility, SIC Code 4952

located immediately south of River Road and approximately 1,000 feet northeast of the intersection of River Road and Rosewood Street in the City of Wichita Falls in Wichita County, Texas 76305

to Wichita River Below Diversion Lake in Segment No. 0214 of the Red River Basin

only according with effluent limitations, monitoring requirements and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize 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 permit shall expire at midnight, December 1, 2015.

ISSUED DATE: **DEC 02 2010**


For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOutfall Number 001

1. During the period beginning upon the date of issuance and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

The annual average flow of effluent shall not exceed 19.91 million gallons per day (MGD); nor shall the average discharge during any two-hour period (2-hour peak) exceed 30,458 gallons per minute (gpm).

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Minimum Self-Monitoring Requirements</u>	
	<u>Daily Avg</u> mg/(lbs/day)	<u>7-day Avg</u> mg/l	<u>Daily Max</u> mg/l	<u>Report Daily Avg. & Daily Max.</u>	<u>Sample Type</u>
Flow, MGD	Report	N/A	Report	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (1,661)	15	25	One/day	Composite
Total Suspended Solids	15 (2,491)	25	40	One/day	Composite
Ammonia Nitrogen	3 (498)	5	7	One/day	Composite
<i>E. coli</i> , CFU or MPN/100 ml	126	N/A	394	Five/week	Grab

2. The effluent shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per day by grab sample.
7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC § 305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§ 5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§ 361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in TWC § 26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

- a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with one million gallons per day or greater permitted flow.
- b. 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.
- c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.
- d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.
- e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.
- f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

- a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
 - i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.
 - ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.
- d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.

The daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

- e. Bacteria concentration (*E. coli* or Enterococci) - 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 n th 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. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
 - f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).
 - g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.
3. Sample Type
- a. Composite sample - For domestic wastewater, 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 (a). For industrial wastewater, 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 (b).
 - b. Grab sample - an individual sample collected in less than 15 minutes.
4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.
5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.
6. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12. Unless otherwise specified, a monthly effluent report shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Monitoring results must be reported on an approved self-report form that is signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act (CWA); TWC §§ 26, 27, and 28; and THSC § 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
 - i. date, time and place of sample or measurement;
 - ii. identity of individual who collected the sample or made the measurement.
 - iii. date and time of analysis;
 - iv. identity of the individual and laboratory who performed the analysis;
 - v. the technique or method of analysis; and
 - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9) any noncompliance which 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 or by facsimile transmission (FAX) to the 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 Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission 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 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. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
 - i. Unauthorized discharges as defined in Permit Condition 2(g).
 - ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.
 - iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.

- c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
 - d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.
8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.
9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. One hundred micrograms per liter (100 µg/L);
 - ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.
 - b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. Five hundred micrograms per liter (500 µg/L);
 - ii. One milligram per liter (1 mg/L) for antimony;
 - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.
10. Signatories to Reports
- All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).
11. All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Executive Director of the following:
- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;
 - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and
 - c. For the purpose of this paragraph, adequate notice shall include information on:
 - i. The quality and quantity of effluent introduced into the POTW; and
 - ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS**1. General**

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
 - i. Violation of any terms or conditions of this permit;
 - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and TWC§ 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
- h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
- i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

3. Inspections and Entry

- a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.
- b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry 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 facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;
 - iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to TWC Chapter 11.

8. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privileges.

9. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy.

- a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
 - i. the permittee;
 - ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
 - iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.
- b. This notification must indicate:
 - i. the name of the permittee and the permit number(s);
 - ii. the bankruptcy court in which the petition for bankruptcy was filed; and
 - iii. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.

2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.
3. Domestic wastewater treatment facilities shall comply with the following provisions:
 - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
 - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources; standby generators, and/or retention of inadequately treated wastewater.
5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).
7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §§ 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words confidential business information on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.
 - a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 149) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.
 - b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.

- c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.
9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.
11. Facilities that generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:
- a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
 - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
 - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Environmental Cleanup Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
 - d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Registration, Review, and Reporting Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.
 - e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
 - f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC § 335 and must include the following, as it pertains to wastewater treatment and discharge:
 - i. Volume of waste and date(s) generated from treatment process;
 - ii. Volume of waste disposed of on-site or shipped off-site;
 - iii. Date(s) of disposal;
 - iv. Identity of hauler or transporter;
 - v. Location of disposal site; and
 - vi. Method of final disposal.
- The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.
12. For industrial facilities to which the requirements of 30 TAC § 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC § 361.

SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site or co-disposal landfill. The disposal of sludge by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized with the TCEQ. This provision does not authorize Distribution and Marketing of sludge. This provision does not authorize land application of Class A Sludge. This provision does not authorize the permittee to land apply sludge on property owned, leased or under the direct control of the permittee.

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION**A. General Requirements**

1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.
2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.
3. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

B. Testing Requirements

1. Sewage sludge shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I Toxicity Characteristic Leaching Procedure (TCLP) or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 3) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 3) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

2. Sewage sludge shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C.

TABLE 1

Pollutant	Ceiling Concentration (Milligrams per kilogram)*
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following methods to ensure that the sludge meets either the Class A or Class B pathogen requirements.

- a. Six alternatives are available to demonstrate compliance with Class A sewage sludge. The first 4 options require either the density of fecal coliform in the sewage sludge be less than 1000 Most Probable Number (MPN) per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. Below are the additional requirements necessary to meet the definition of a Class A sludge.

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(2)(A) for specific information.

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52° Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%.

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(iv-vi) for specific information.

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of shall be treated in one of the processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion.

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of shall be treated in a process that has been approved by the U. S. Environmental Protection Agency as being equivalent to those in Alternative 5.

b. Three alternatives are available to demonstrate compliance with Class B criteria for sewage sludge.

Alternative 1

- i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.
- ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;
- iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U. S. Environmental Protection Agency final guidance;
- iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and
- v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

Alternative 3 - Sewage sludge shall be treated in an equivalent process that has been approved by the U. S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U. S. Environmental Protection Agency final guidance;
- iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;
- iv. The Executive Director will accept from the U. S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and

- v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition, the following site restrictions must be met if Class B sludge is land applied:

- i. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months prior to incorporation into the soil.
- iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.
- v. Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.
- vi. Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
- vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.
- viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.
- ix. Land application of sludge shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.

- Alternative 6 -** The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.
- Alternative 7 -** The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.
- Alternative 8 -** The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.
- Alternative 9 -**
- i. Sewage sludge shall be injected below the surface of the land.
 - ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.
 - iii. When sewage sludge that is injected below the surface of the land is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.
- Alternative 10 -**
- i. Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.
 - ii. When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test	- annually
PCBs	- annually

All metal constituents and fecal coliform or *Salmonella* sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

Amount of sewage sludge (*) metric tons per 365-day period	Monitoring Frequency
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

(*) The amount of bulk sewage sludge applied to the land (dry weight basis).

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

A. Pollutant Limits

Table 2

<u>Pollutant</u>	<u>Cumulative Pollutant Loading Rate (pounds per acre)*</u>
Arsenic	36
Cadmium	35
Chromium	2677
Copper	1339
Lead	268
Mercury	15
Molybdenum	Report Only
Nickel	375
Selenium	89
Zinc	2500

Table 3

<u>Pollutant</u>	<u>Monthly Average Concentration (milligrams per kilogram)*</u>
Arsenic	41
Cadmium	39
Chromium	1200
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report Only
Nickel	420
Selenium	36
Zinc	2800

*Dry weight basis

B. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A or Class B pathogen reduction requirements as defined above in Section I.B.3.

C. Management Practices

1. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.
2. Bulk sewage sludge not meeting Class A requirements shall be land applied in a manner which complies with the Management Requirements in accordance with 30 TAC § 312.44.
3. Bulk sewage sludge shall be applied at or below the agronomic rate of the cover crop.

4. An information sheet shall be provided to the person who receives bulk sewage sludge sold or given away. The information sheet shall contain the following information:
 - a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.
 - b. A statement that application of the sewage sludge to the land is prohibited except in accordance with the instruction on the label or information sheet.
 - c. The annual whole sludge application rate for the sewage sludge application rate for the sewage sludge that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

D. Notification Requirements

1. If bulk sewage sludge is applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:
 - a. The location, by street address, and specific latitude and longitude, of each land application site.
 - b. The approximate time period bulk sewage sludge will be applied to the site.
 - c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.
2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

E. Record keeping Requirements

The sludge documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative for a period of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
2. A description of how the pathogen reduction requirements are met (including site restrictions for Class B sludge, if applicable).
3. A description of how the vector attraction reduction requirements are met.
4. A description of how the management practices listed above in Section II.C are being met.
5. The following certification statement:

"I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:

- a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.
- b. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.
- c. The number of acres in each site on which bulk sludge is applied.
- d. The date and time sludge is applied to each site.
- e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
- f. The total amount of sludge applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 3) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30 of each year the following information:

1. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
2. The frequency of monitoring listed in Section I.C. that applies to the permittee.
3. Toxicity Characteristic Leaching Procedure (TCLP) results.
4. Identity of hauler(s) and TCEQ transporter number.
5. PCB concentration in sludge in mg/kg.
6. Date(s) of disposal.
7. Owner of disposal site(s).
8. Texas Commission on Environmental Quality registration number, if applicable.
9. Amount of sludge disposal dry weight (lbs/acre) at each disposal site.
10. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
11. Level of pathogen reduction achieved (Class A or Class B).
12. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, include information on how site restrictions were met.
13. Vector attraction reduction alternative used as listed in Section I.B.4.
14. Annual sludge production in dry tons/year.

15. Amount of sludge land applied in dry tons/year.
16. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge treatment activities, shall be attached to the annual reporting form.
17. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.
 - a. The location, by street address, and specific latitude and longitude.
 - b. The number of acres in each site on which bulk sewage sludge is applied.
 - c. The date and time bulk sewage sludge is applied to each site.
 - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk sewage sludge applied to each site.
 - e. The amount of sewage sludge (i.e., dry tons) applied to each site.

The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION III REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

- A. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.
- C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.
- D. Sewage sludge shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 3) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 3) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

- E. Sewage sludge shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.
- F. Record keeping Requirements

The permittee shall develop the following information and shall retain the information for five years.

- 1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.
- 2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 3) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year the following information:

1. Toxicity Characteristic Leaching Procedure (TCLP) results.
2. Annual sludge production in dry tons/year.
3. Amount of sludge disposed in a municipal solid waste landfill in dry tons/year.
4. Amount of sludge transported interstate in dry tons/year.
5. A certification that the sewage sludge meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
6. Identity of hauler(s) and transporter registration number.
7. Owner of disposal site(s).
8. Location of disposal site(s).
9. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

OTHER REQUIREMENTS

1. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

This Category A facility must be operated by a chief operator or an operator holding a Category A license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

2. The facility is not located in the Coastal Management Program boundary.
3. Chronic toxic criteria apply at the edge of the mixing zone. The mixing zone is defined as 300 feet downstream and 100 feet upstream from the point of discharge.
4. The permittee is hereby placed on notice that this permit may be reviewed by the TCEQ after the completion of any new intensive water quality survey on Segment No. 0214 of the Red River Basin and any subsequent updating of the water quality model for Segment No. 0214, in order to determine if the limitations and conditions contained herein are consistent with any such revised model. The permit may be amended, pursuant to 30 TAC §305.62, as a result of such review. The permittee is also hereby placed on notice that effluent limits may be made more stringent at renewal based on, for example, any change to modeling protocol approved in the TCEQ Continuing Planning Process.
5. In accordance with 30 TAC §319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee will be given a less frequent measurement schedule. For this permit, 5/week will be reduced to 3/week. A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule, and the permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.

CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The permittee shall operate an industrial pretreatment program in accordance with Sections 402(b)(8) and (b)(9) of the Clean Water Act, the General Pretreatment Regulations (40 CFR Part 403) and the approved City of Wichita Falls POTW pretreatment program submitted by the permittee. The pretreatment program was approved by the TCEQ on December 24, 1983, and modified on April 29, 1994, and December 10, 2002.

The legal authority and the POTW's pretreatment program are not in compliance with the current 40 CFR Part 403 regulations [rev. *Federal Register*/ Vol. 70/ No. 198/ Friday, October 14, 2005/ *Rules and Regulations*, pages 60134-60798] and the 30 TAC Chapter 315, as amended. In order to ensure that the permittee has a program to assure compliance with such pretreatment standards and requirements, the permittee shall submit a modification to their pretreatment program containing all required [i.e. more stringent] Streamlining Rule provisions to the Executive Director care of the Storm Water & Pretreatment Team (MC148) of the Water Quality Division within twelve (12) months of the issued date of this permit. This submission shall be signed and certified by the permittee [according to 40 CFR §122.41(k)].

The POTW pretreatment program is hereby incorporated by reference and shall be implemented in a manner consistent with the following requirements:

- a. Industrial user (IU) information shall be kept current according to 40 CFR §§403.8(f)(2)(i) and (ii) and updated at a frequency set forth in the approved pretreatment program to reflect accurate characterization of all IUs;
- b. The frequency and nature of IU compliance monitoring activities by the permittee shall be consistent with the approved POTW pretreatment program and commensurate with the character, consistency, and volume of waste. The permittee is required to inspect and sample the effluent from each significant industrial user (SIU) at least once per year, except as specified in 40 CFR §403.8 (f)(2)(v). This is in addition to any industrial self-monitoring activities;
- c. The permittee shall enforce and obtain remedies for IU noncompliance with applicable pretreatment standards and requirements and the approved POTW pretreatment program;
- d. The permittee shall control through permit, order, or similar means, the contribution to the POTW by each IU to ensure compliance with applicable pretreatment standards and requirements and the approved POTW pretreatment program. In the case of SIUs (identified as significant under 40 CFR §403.3 (v)), this control shall be achieved through individual permits or general control mechanisms, in accordance with 40 CFR §403.8(f)(1)(iii).

Both individual and general control mechanisms must be enforceable and contain, at a minimum, the following conditions:

- (1) Statement of duration (in no case more than five years);
- (2) Statement of non-transferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator;
- (3) Effluent limits, which may include enforceable best management practices (BMPs), based on applicable general pretreatment standards, categorical pretreatment standards, local limits, and State and local law;
- (4) Self-monitoring, sampling, reporting, notification and record keeping requirements, identification of the pollutants to be monitored (including, if applicable, the process for seeking a waiver for a pollutant neither present nor expected to be present in the IU's discharge in accordance with 40 CFR §403.12(e)(2), or a specific waived pollutant in the case of an individual control mechanism), sampling location, sampling frequency, and sample type, based

- on the applicable general pretreatment standards in 40 CFR Part 403, categorical pretreatment standards, local limits, and State and local law;
- (5) Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond federal deadlines; and,
 - (6) Requirements to control slug discharges, if determined by the POTW to be necessary.
- e. For those IUs who are covered by a general control mechanism, in order to implement 40 CFR §403.8(f)(1)(ii)(A)(2), a monitoring waiver for a pollutant neither present nor expected to be present in the IU's discharge is not effective in the general control mechanism until after the POTW has provided written notice to the SIU that such a waiver request has been granted in accordance with 40 CFR §403.12(e)(2).
 - f. The permittee shall evaluate, whether each SIU needs a plan or other action to control slug discharges, in accordance with 40 CFR §403.8(f)(2)(vi). If the POTW decides that a slug control plan is needed, the plan shall contain at least the minimum elements required in 40 CFR §403.8(f)(2)(vi);
 - g. The permittee shall provide adequate staff, equipment, and support capabilities to carry out all elements of the pretreatment program; and,
 - h. The approved program shall not be modified by the permittee without the prior approval of the Executive Director, according to 40 CFR §403.18.
2. The permittee is under a continuing duty to: establish and enforce specific local limits to implement the provisions of 40 CFR §403.5, develop and enforce local limits as necessary, and modify the approved pretreatment program as necessary to comply with federal, state and local law, as amended. The permittee may develop BMPs to implement paragraphs 40 CFR §§403.5(c)(1) and (c)(2). Such BMPs shall be considered local limits and pretreatment standards. The permittee is required to effectively enforce such limits and to modify their pretreatment program, including the Legal Authority, Enforcement Response Plan and/or Standard Operating Procedures, if required by the Executive Director to reflect changing conditions at the POTW. Substantial modifications will be approved in accordance with 40 CFR §403.18, and modifications will become effective upon approval by the Executive Director in accordance with 40 CFR §403.18.

The permittee shall submit to the TCEQ Storm Water & Pretreatment Team (MC 148) of the Water Quality Division, within sixty (60) days of the issued date of this permit, either:

(1) a written certification that a technical reassessment has been performed, and that the evaluation demonstrates that existing technically based local limits (TBLLs) attain the Texas Surface Water Quality Standards [30 TAC Chapter 307] in water in the state, are adequate to prevent pass through of pollutants, inhibition of or interference with the treatment facility, worker health and safety problems, and sludge contamination [Submit the Reassessment Form No. TCEQ-20221]; or

(2) a written notification that a technical redevelopment of the current TBLLs, draft legal authority which incorporates such revisions, and any additional modifications to the pretreatment program, as required by 40 CFR Part 403 [rev. 10/14/05], applicable state and local law, including an Enforcement Response Plan and Standard Operating Procedures and all required [i.e. more stringent] Streamlining Rule provisions, will be submitted within twelve (12) months of the issued date of this permit. The POTW is required to evaluate any enforceable BMP loadings during the redevelopment of the current TBLLs. The technical redevelopment of the current TBLLs should be developed in accordance with EPA's *Local Limits Development Guidance*, July 2004, and EPA Region 6's *Technically Based Local Limits Development Guidance*, October 12, 1993. This submission shall be signed and certified by the permittee [according to 40 CFR §122.41(k)].

If after review of the substantial modification submission, the Executive Director determines that the submission does not comply with applicable requirements, including 40 CFR §§403.8 and 403.9, the Executive Director will notify the permittee. According to 40 CFR §403.11(c), the notification will include suggested modifications to bring the substantial modification submission into compliance with applicable requirements, including 40 CFR §§403.8(b) and (f), and 40 CFR §403.9(b). In such a case, revised information will be necessary for the Executive Director to make a determination on whether to approve or deny the permittee's substantial modification submission.

Upon approval by the Executive Director of the substantial modification to this approved POTW pretreatment program, the requirement to develop and enforce specific prohibitions and/or limits to implement the prohibitions and limits set forth in 40 CFR §§403.5 (a)(1), (b), (c)(1) and (3), and (d) is a condition of this permit. The specific prohibitions set out in 40 CFR §403.5(b) shall be enforced by the permittee unless modified under this provision.

3. The permittee shall analyze the treatment facility influent and effluent for the presence of the toxic pollutants listed in the Texas Surface Water Quality Standards [30 TAC Chapter 307], and in 40 CFR Part 122 Appendix D Table II at least once per six months and the toxic pollutants in Table III at least once per three months. If, based upon information available to the permittee, there is reason to suspect the presence of any toxic or hazardous pollutant listed in 40 CFR Part 122 Appendix D Table V, or any other pollutant, known or suspected to adversely affect treatment plant operation, receiving water quality, or solids disposal procedures, analysis for those pollutants shall be performed at least once per three months on both the influent and the effluent.

The influent and effluent samples collected shall be composite samples consisting of at least 12 aliquots collected at approximately equal intervals over a representative 24 hour period and composited according to flow. Sampling and analytical procedures shall be in accordance with guidelines established in 40 CFR Part 136, as amended; as approved by the EPA through the application for alternate test procedures; or as suggested in Tables 8 and 9 of the *Procedures to Implement the Texas Surface Water Quality Standards*, January 2003, as amended and adopted by the TCEQ. The effluent samples shall be analyzed to the minimum analytical level (MAL). Where composite samples are inappropriate, due to sampling, holding time, or analytical constraints, at least four (4) grab samples, taken at equal intervals over a representative 24 hour period, shall be taken.

4. The permittee shall prepare annually a list of IUs which during the preceding twelve (12) months were in significant noncompliance (SNC) with applicable pretreatment requirements. For the purposes of this section of the permit, "Contributing Industries and Pretreatment Requirements", SNC shall be determined based upon the more stringent of either criteria established at 40 CFR §403.8(f)(2)(viii) [rev. 10/14/05] or criteria established in the approved POTW pretreatment program. This list is to be published annually during the month of January in a newspaper of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW.

In addition, each January the permittee shall submit an updated pretreatment program annual status report, in accordance with 40 CFR §§403.12(i) and (m), to the TCEQ Storm Water & Pretreatment Team (MC148) of the Water Quality Division. The report shall contain the following information as well as the information on the tables in this section. The report summary shall be submitted on the Pretreatment Performance Summary (PPS) form [TCEQ-20218].

- a. An updated list of all regulated IUs as indicated in this section. For each listed IU, the following information shall be included:

- (1) Standard Industrial Classification (SIC) or North American Industry Classification System (NAICS) code and categorical determination.

- (2) If the pretreatment program has been modified and approved to incorporate reduced monitoring for any of the categorical IUs as provided by 40 CFR Part 403 [rev. 10/14/05], then the list must also identify:
- * categorical IUs subject to the conditions for reduced monitoring and reporting requirements under 40 CFR §§ 403.12(e)(1) and (3);
 - * those IUs that are non-significant categorical industrial users (NSCIUs) under 40 CFR §403.3(v)(2); and
 - * those IUs that are middle tier categorical industrial users (MTCIUs) under 40 CFR §403.12(e)(3).
- (3) Control mechanism status.
- * Indicate whether the IU has an effective individual or general control mechanism, and the date such control mechanism was last issued, reissued, or modified;
 - * Indicate which IUs were added to the system, or newly identified, during the pretreatment year reporting period;
 - * Include the type of general control mechanisms; and
 - * Report all NSCIU annual evaluations performed, as applicable.
- (4) A summary of all compliance monitoring activities performed by the POTW during the pretreatment year reporting period. The following information shall be reported:
- * Total number of inspections performed; and
 - * Total number of sampling events conducted.
- (5) Status of IU compliance with effluent limitations, reporting, and narrative standard (which may include enforceable BMPs, narrative limits, and/or operational standards) requirements. Compliance status shall be defined as follows:
- * Compliant (C) - no violations during the pretreatment year reporting period;
 - * Non-compliant (NC) - one or more violations during the pretreatment year reporting period but does not meet the criteria for SNC; and
 - * Significant Noncompliance (SNC) - in accordance with requirements described above in this section.
- (6) For noncompliant IUs indicate the nature of the violations, the type and number of actions taken (notice of violation, administrative order, criminal or civil suit, fines or penalties collected, etc.) and current compliance status. If any IU was on a schedule to attain compliance with effluent limits or narrative standards, indicate the date the schedule was issued, and the date compliance is to be attained.
- b. A list of each IU whose authorization to discharge was terminated or revoked during the pretreatment year reporting period and the reason for termination.
- c. A report on any interference, pass through, upset, or POTW permit violations known or suspected to be caused by IUs and response actions taken by the permittee.
- d. The results of all influent and effluent analyses performed pursuant to Item 3 of this section.
- e. An original newspaper public notice, or copy of the newspaper publication with official affidavit, of the list of IUs that meet the criteria of SNC, giving the name of the newspaper and date the list was

published.

- f. The daily average water quality based effluent concentrations (from the TCEQ's Texas Toxicity Modeling Program (TexTox)) necessary to attain the Texas Surface Water Quality Standards, 30 TAC Chapter 307, in water in the state.
 - g. The maximum allowable headworks loading (MAHL) in pounds per day (lb/day) of the approved TBLLs or for each pollutant of concern (POC) for which the permittee has calculated a MAHL. In addition, the influent loading as a percent of the MAHL, using the annual average flow of the wastewater treatment plant in million gallons per day (MGD) during the pretreatment year reporting period, for each pollutant that has an adopted TBLL or for each POC for which the permittee has calculated a MAHL. (See Endnotes No. 2 at the end of this section for the influent loading as a percent of the MAHL equation)
 - h. The permittee may submit the updated pretreatment program annual status report information in tabular form using the example table format provided. Please attach, on a separate sheet, explanations to document the various pretreatment activities, including IU permits that have expired, BMP violations, and any sampling events that were not conducted by the permittee as required.
 - i. A summary of changes to the POTW's pretreatment program that have not been previously reported to the Approval Authority.
5. The permittee shall provide adequate written notification to the Executive Director care of the Wastewater Permitting Section (MC 148) of the Water Quality Division, within 30 days of the permittee's knowledge of the following:
- a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if the indirect discharger was directly discharging those pollutants; and
 - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

Adequate notice shall include information on the quality and quantity of effluent to be introduced into the treatment works, and any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

Revised February 2008

**TPDES Pretreatment Program Annual Report Form
for Updated Industrial Users List**

Reporting month/year: _____, _____ to _____, _____

TPDES Permit No.: _____ Permittee: _____ Treatment Plant: _____

PRETREATMENT PROGRAM STATUS REPORT UPDATED INDUSTRIAL USERS ¹ LIST																	
Industrial User Name	SIC or NAICS Code	CIU ³	CONTROL MECHANISM				New User ⁷ (Y or N)	Times Inspected by the CA	Times Sampled by the CA	COMPLIANCE STATUS During the Pretreatment Year Reporting Period ⁴ (C = Compliant, NC = Noncompliant, SNC = Significant Noncompliance)							
			Y/N or NR ⁵	IND or GEN or NR	Last Action ⁴	TBLs or TBLs only ⁷				REPORTS				Certifications	Effluent Limits	Narrative Standards	
										BMR	90-Day	Self-Assess	Self-Monitoring ⁸				NSCIU

- 1 Include all significant industrial users (SIUs), non-significant categorical industrial users (NSCIUs) as defined in 40 CFR §403.3(v)(2), and/or middle tier categorical industrial users (MTCIUs) as defined in 40 CFR §403.12(e)(3). Please do not include non-significant noncategorical IUs that are covered under best management practices (BMPs) or general control mechanisms.
- 2 Categorical determination (include 40 CFR citation and NSCIU or MTCIU status, if applicable).
- 3 Indicate whether the IU is a new user. If the answer is No or N, then indicate the expiration date of the last issued IU permit.
- 4 The term SNC applies to a broader range of violations, such as daily maximum, long-term average, instantaneous limits, and narrative standards (which may include enforceable BMPs, narrative limits and/or operational standards). Any other violation, or group of violations, which the POTW determines will adversely affect the operation or implementation of the local Pretreatment Program now includes BMP violations (40 CFR §403.3(f)(2)(viii)(H)).
- 5 Code NR= Name required (NSCIUs only); IND = individual control mechanism; GEN = general control mechanism. Include as a footnote (or on a separate page) the name of the general control mechanism used for similar groups of IUs, identify the similar types of operations and types of wastes that are the same for each general control mechanism. Any BMPs through general control mechanisms that are applied to non-significant IUs need to be reported separately, e.g. the sector type and BMP description.
- 6 Permit or NSCIU evaluations as applicable.
- 7 According to 40 CFR §403.12(i)(1), indicate whether the IU is subject to technically based local limits (TBLs) that are more stringent than categorical pretreatment standards, e.g. where there is one end-of-pipe sampling point at a CIU, and you have determined that the TBLs are more stringent than the categorical pretreatment standards for any pollutant at the end-of-pipe sampling point; OR the IU is subject only to local limits (TBLs only), e.g. the IU is a non-categorical SIU subject only to TBLs at the end-of-pipe sampling point.
- 8 For those IUs where a monitoring waiver has been granted, please add the code "W" (after either C, NC, or SNC codes) and indicate the pollutant(s) for which the waiver has been granted.

**TPDES Pretreatment Program Annual Report Form
for Enforcement Actions Taken**

Reporting month/year: _____, ____ to _____, ____

TPDES Permit No: _____ Permittee: _____ Treatment Plant: _____

Overall SNC ____%

SNC¹⁰ based on: Effluent Violations ____% Reporting Violations ____% Narrative Standard Violations ____%

Noncompliant Industrial Users - Enforcement Actions Taken														
Industrial User Name	Nature of Violation ¹¹				Number of Actions Taken					Penalties Collected (Do not include Surcharge)	Compliance Schedule			Comments
	Effluent Limits	Reports	NSCIU Certifications	Narrative Standards	NOV	A.O.	Civil	Criminal	Other		Y or N	Date Issued	Date Due	Current Status Returned to Compliance (Y or N)

10 # %

- ____ Pretreatment Standards [WENDB-PSNC] (Local Limits/Categorical Standards)
 ____ Reporting Requirements [WENDB-PSNC]
 ____ Narrative Standards

11 Please specify a separate number for each type of violation, e.g. report, notification, and/or NSCIU certification.

**TPDES Pretreatment Program Annual Report Form
for Influent and Effluent Monitoring Results¹**

Reporting month/year: _____, _____ to _____, _____

TPDES Permit No.: _____ Permittee: _____ Treatment Plant: _____

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS

POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL)				Average Influent % of the MAHL ²	Daily Average Effluent Limit ($\mu\text{g/L}$) ³	Effluent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL) ⁴			
		Date	Date	Date	Date			Date	Date	Date	Date
METALS, CYANIDE AND PHENOLS											
Antimony, Total											
Arsenic, Total											
Beryllium, Total											
Cadmium, Total											
Chromium, Total											
Chromium (Hex)											
Chromium (Tri) ⁵											
Copper, Total											
Lead, Total											
Mercury, Total											
Nickel, Total											
Selenium, Total											
Silver, Total											
Thallium, Total											
Zinc, Total											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS

POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL)				Average Influent % of the MAHL ²	Daily Average Effluent Limit ($\mu\text{g/L}$) ³	Effluent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL) ⁴			
		Date	Date	Date	Date			Date	Date	Date	Date
Cyanide, Available ⁶											
Cyanide, Total											
Phenols, Total											
VOLATILE COMPOUNDS											
Acrolein											
Acrylonitrile											
Benzene											
Bromoform							See TTHM				
Carbon Tetrachloride											
Chlorobenzene											
Chlorodibromomethane							See TTHM				
Chloroethane											
2-Chloroethylvinyl Ether											
Chloroform							See TTHM				
Dichlorobromomethane							See TTHM				
1,1-Dichloroethane											
1,2-Dichloroethane											
1,1-Dichloroethylene											
1,2-Dichloropropane											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS

POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in $\mu\text{g/L}$ (Actual Concentration or $\leq \text{MAL}$)				Average Influent % of the MAHL ²	Daily Average Effluent Limit ($\mu\text{g/L}$) ³	Effluent Measured in $\mu\text{g/L}$ (Actual Concentration or $\leq \text{MAL}$) ⁴			
		Date	Date	Date	Date			Date	Date	Date	Date
1,3-Dichloropropylene											
Ethyl benzene											
Methyl Bromide											
Methyl Chloride											
Methylene Chloride											
1,1,2,2-Tetrachloroethane											
Tetrachloroethylene											
Toluene											
1,2-Trans-Dichloroethylene											
1,1,1-Trichloroethane											
1,1,2-Trichloroethane											
Trichloroethylene											
Vinyl Chloride											
ACHD COMPOUNDS											
2-Chlorophenol											
2,4-Dichlorophenol											
2,4-Dimethylphenol											
4,6-Dinitro-o-Cresol											
2,4-Dinitrophenol											
2-Nitrophenol											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS											
POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL)				Average Influent % of the MAHL ²	Daily Average Effluent Limit ³ ($\mu\text{g/L}$)	Effluent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL) ⁴			
		Date	Date	Date	Date			Date	Date	Date	Date
4-Nitrophenol											
P-Chloro-m-Cresol											
Pentachlorophenol											
2,4,6-Trichlorophenol											
Phenol											
BASE/NEUTRAL COMPOUNDS											
Acenaphthene											
Acenaphthylene											
Anthracene											
Benzidine											
Benzo(a)Anthracene											
Benzo(a)Pyrene											
3,4-Benzofluoranthene											
Benzo(ghi)Perylene											
Benzo(k)Fluoranthene											
Bis(2-Chloroethoxy)Methane											
Bis(2-Chloroethyl)Ether											
Bis(2-Chloroisopropyl)Ether											
Bis(2-Ethylhexyl)Phthalate											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS

POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL)				Average Influent % of the MAHL ²	Daily Average Effluent Limit ($\mu\text{g/L}$) ³	Effluent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL) ⁴			
		Date	Date	Date	Date			Date	Date	Date	Date
4-Bromophenyl Phenyl Ether											
Butylbenzyl Phthalate											
2-Chloronaphthalene											
4-Chlorophenyl Phenyl Ether											
Chrysene											
Dibenzo(a,h)Anthracene											
1,2-Dichlorobenzene											
1,3-Dichlorobenzene											
1,4-Dichlorobenzene											
3,3-Dichlorobenzidine											
Diethyl Phthalate											
Dimethyl Phthalate											
Di-n-Butyl Phthalate											
2,4-Dinitrotoluene											
2,6-Dinitrotoluene											
Di-n-Octyl Phthalate											
1,2-Diphenyl Hydrazine											
Fluoranthene											
Fluorene											
Hexachlorobenzene											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS											
POLLUTANT	MAHL, If Applicable in lb/day	Influent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL)				Average Influent % of the MAHL ²	Daily Average Effluent Limit $(\mu\text{g/L})$ ³	Effluent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL) ⁴			
		Date	Date	Date	Date			Date	Date	Date	Date
Hexachlorobutadiene											
Hexachloro-cyclopentadiene											
Hexachloroethane											
Indeno(1,2,3-cd)pyrene											
Isophorone											
Naphthalene											
Nitrobenzene											
N-Nitrosodimethylamine											
N-Nitrosodi-n-Propylamine											
N-Nitrosodiphenylamine											
Phenanthrene											
Pyrene											
1,2,4-Trichlorobenzene											
PESTICIDES											
Aldrin											
Alpha-hexachlorocyclohexane (BHC)											
beta-BHC											
gamma-BHC (Lindane)											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS											
POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL)				Average Influent % of the MAHL ²	Daily Average Effluent Limit $(\mu\text{g/L})$ ³	Effluent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL) ⁴			
		Date	Date	Date	Date			Date	Date	Date	Date
delta-BHC											
Chlordane											
4,4-DDT											
4,4-DDE											
4,4-DDD											
Dieldrin											
alpha-Endosulfan											
beta-Endosulfan											
Endosulfan Sulfate											
Endrin											
Endrin Aldehyde											
Heptachlor											
Heptachlor Epoxide											
Polychlorinated biphenols (PCBs) - The sum of PCB concentrations not to exceed daily average value											
PCB-1242							See PCBs				
PCB-1254							See PCBs				
PCB-1221							See PCBs				
PCB-1232							See PCBs				

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS

POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL)				Average Influent % of the MAHL ²	Daily Average Effluent Limit ($\mu\text{g/L}$) ³	Effluent Measured in $\mu\text{g/L}$ (Actual Concentration or < MAL) ⁴			
		Date	Date	Date	Date			Date	Date	Date	Date
PCB-1248							See PCBs				
PCB-1260							See PCBs				
PCB-1016							See PCBs				
Toxaphene											
ADDITIONAL TOXIC POLLUTANTS REGULATED UNDER 30 TAC CHAPTER 307											
Aluminum											
Barium											
Bis(chloromethyl) ether ⁷											
Carbaryl											
Chloropyrifos											
Cresols											
2,4-D											
Dantol ⁸											
Demeton											
Diazinon											
Dicofol											
Dioxin/Furans ⁹											
Diuron											
Fluoride											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS											
POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in $\mu\text{g/L}$ (Actual Concentration or $\leq$ MAL)				Average Influent % of the MAHL ²	Daily Average Effluent Limit ($\mu\text{g/L}$) ³	Effluent Measured in $\mu\text{g/L}$ (Actual Concentration or $\leq$ MAL) ⁴			
		Date	Date	Date	Date			Date	Date	Date	Date
Guthion											
Hexachlorophene											
Malathion											
Methoxychlor											
Methyl Ethyl Ketone											
Mirex											
Nitrate-Nitrogen											
N-Nitrosodietylamine											
N-Nitro-di-n-Butylamine											
Parathion											
Pentachlorobenzene											
Pyridine											
1,2-Dibromoethane											
1,2,4,5-Tetrachlorobenzene											
2,4,5-TP (Silvex)											
Tributyltin ⁹											
2,4,5-Trichlorophenol											
THM (Total Trihalomethanes)											

Footnotes:

1. It is advised that the permittee collect the influent and effluent samples considering flow detention time through each wastewater treatment plant (WWTP).
2. The MAHL of the approved TBLLs or for each pollutant of concern (POC) for which the permittee has calculated a MAHL. Only complete the column labeled, "Average Influent % of the MAHL", as a percentage, for pollutants that have approved TBLLs or for each POC for which the permittee has calculated a MAHL (U.S. Environmental Protection Agency Local Limits Development Guidance, July 2004, EPA933-R-04-002A).

The % of the MAHL is to be calculated using the following formulas:

$$\text{Equation A: } L_{\text{INF}} = (C_{\text{POLL}} \times Q_{\text{WWTP}} \times 8.34) / 1000$$

$$\text{Equation B: } L_{\%} = (L_{\text{INF}} / \text{MAHL}) \times 100$$

Where:

L_{INF} =	Current Average (Avg) influent loading in lb/day
C_{POLL} =	Avg concentration in $\mu\text{g/L}$ of all influent samples collected during the pretreatment year.
Q_{WWTP} =	Annual average flow of the WWTP in MGD, defined as the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months (or during the pretreatment year), and as described in the Definitions and Standard Permit Conditions section.
$L_{\%}$ =	% of the MAHL
MAHL =	Calculated MAHL in lb/day
8.34 =	Unit conversion factor

3. Daily average effluent limit (metal values are for total metals) as derived by the Texas Toxicity Modeling Program (ToxTox). Effluent limits as calculated are designed to be protective of the Texas Surface Water Quality Standards. The permittee shall determine and indicate which effluent limit is the most stringent between the 30 TAC Chapter 319 (Hazardous Metal Rule), ToxTox values, or any applicable TPDES permit limit in Effluent Limitations and Monitoring Requirements Section. Shaded blocks need not be filled in unless the permittee has received a permit requirement/limit for the particular parameter.
4. Minimum analytical levels (MALs) and analytical methods as suggested in Tables 8 and 9 of the Procedures to Implement the Texas Surface Water Quality Standards (January 2003), as amended and adopted by the TCEQ Commission. Pollutants that are not detectable above the MAL need to be reported as less than (<) the MAL numeric value.
5. Report result by subtracting Hexavalent Chromium from Total Chromium.
6. Either the method for Amenable to Chlorination or Weak-Acid Dissociable is authorized.
7. Hydrolyzes in water. Will not require permittee to analyze at this time.
8. EPA procedure not approved. Will not require permittee to analyze at this time.
9. Analyses are not required at this time for these pollutants unless there is reason to believe that these pollutants may be present.

BIOMONITORING REQUIREMENTS**CHRONIC BIOMONITORING REQUIREMENTS: FRESHWATER**

The provisions of this Section apply to Outfall 001 for whole effluent toxicity testing (biomonitoring).

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, reproduction, or growth of the test organisms.
- b. The permittee shall conduct the following toxicity tests utilizing the test organisms, procedures and quality assurance requirements specified in this Part of the permit and in accordance with "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition" (EPA-821-R-02-013), or the most recent update:
 - 1) Chronic static renewal 7-day survival and reproduction test using the water flea (*Ceriodaphnia dubia*) (Method 1002.0 or the most recent update). This test should be terminated when 60% of the surviving adults in the control produce three broods or at the end of eight days, whichever comes first. This test shall be conducted once per quarter.
 - 2) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*) (Method 1000.0 or the most recent update). 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 herein defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit. All test results, valid or invalid, must be submitted as described below.

- c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These additional effluent concentrations are 27%, 35%, 47%, 63%, and 84% effluent. The critical dilution, defined as 63% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.
- d. This permit may be amended to require a Whole Effluent Toxicity (WET) limit, a Chemical-Specific (CS) limit, a Best Management Practice (BMP), additional toxicity testing, and/or other appropriate actions to address toxicity. The permittee may be required to conduct additional biomonitoring tests and/or a Toxicity Reduction Evaluation (TRE) if biomonitoring data indicate multiple numbers of unconfirmed toxicity events.
- e. Testing Frequency Reduction for fathead minnow only
 - 1) If none of the first four consecutive quarterly tests demonstrates significant lethal effects, the permittee may submit this information in writing and, upon approval, reduce the testing frequency to once per year for the fathead minnow.
 - 2) If one or more of the first four consecutive quarterly tests demonstrates significant sub-lethal effects, the permittee shall continue quarterly testing for the fathead minnow until

four consecutive quarterly tests demonstrate no significant sub-lethal effects. At that time, the permittee may apply for the appropriate testing frequency reduction for the fathead minnow.

- 3) If one or more of the first four consecutive quarterly tests demonstrates significant lethal effects, the permittee shall continue quarterly testing for the fathead minnow until the permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant lethal effects, the permittee will resume a quarterly testing frequency for the fathead minnow until the 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 fail to meet the following criteria:

- 1) a control mean survival of 80% or greater;
- 2) a control mean number of water flea neonates per surviving adult of 15 or greater;
- 3) a control mean dry weight of surviving fathead minnow larvae of 0.25 mg or greater;
- 4) a control Coefficient of Variation percent (CV%) of 40 or less in between replicates for the young of surviving females in the water flea reproduction and survival test; and the growth and survival endpoints in the fathead minnow growth and survival test;
- 5) a critical dilution CV% of 40 or less for young of surviving females in the water flea reproduction and survival test; and the growth and survival endpoints for the fathead minnow growth and 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 47 or less for water flea reproduction;
- 7) a Percent Minimum Significant Difference of 30 or less for fathead minnow growth.

- b. Statistical Interpretation

- 1) For the water flea survival test, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be Fisher's Exact Test as described in the "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition" (EPA-821-R-02-013), or the most recent update thereof.
- 2) For the water flea reproduction test and the fathead minnow 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 methods described in the "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition" (EPA-821-R-02-013), or the most recent update thereof.
- 3) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported correctly. The EPA manual,

"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.

- 4) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to 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.
- 5) 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 at the 95% confidence level between the survival, reproduction, or growth of the test organism(s) in a specified effluent dilution compared to the survival, reproduction, or growth of the test organism(s) in the control (0% effluent).
- 6) 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 3 above.
- 7) Pursuant to the responsibility assigned to the permittee in Part 2.b.3), test results that demonstrate a non-monotonic (non-continuous) concentration-response relationship may be submitted, prior to the due date, for technical review. The above-referenced guidance manual will be used when making a determination of test acceptability.
- 8) Staff will review test results for consistency with rules, procedures, and permit requirements.

c. Dilution Water

- 1) Dilution water used in the toxicity tests shall be the receiving water collected at a point upstream of the discharge as close as possible to the discharge point, but unaffected by the discharge. Where the toxicity tests are conducted on effluent discharges to receiving waters that are classified as intermittent streams, or where the toxicity tests are conducted on effluent discharges where no receiving water is available due to zero flow conditions, the permittee shall: (a) substitute a synthetic dilution water that has a pH, hardness, and alkalinity similar to that of the closest downstream perennial water unaffected by the discharge, or (b) utilize the closest downstream perennial water unaffected by the discharge.
- 2) Where the receiving water proves unsatisfactory as a result of pre-existing instream toxicity (i.e. fails to fulfill the test acceptance criteria of item 2.a.), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
 - a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements of item 2.a;

- b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days);
- c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3 of this Section.

The synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or a natural water in the drainage basin that is unaffected by the discharge, provided the magnitude of these parameters will not cause toxicity in a synthetic dilution water control that has been formulated to match the pH, hardness, and alkalinity naturally found in the receiving water.

Upon approval, the permittee may substitute other appropriate dilution water with chemical and physical characteristics similar to that of the receiving water.

d. **Samples and Composites**

- 1) The permittee shall collect a minimum of three composite samples from Outfall 001. The second and third composite samples will be used for the renewal of the dilution concentrations for each toxicity test.
- 2) The permittee shall collect the composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance discharged on an intermittent basis.
- 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the first composite sample. The holding time for any subsequent composite 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 Outfall 001 ceases discharging during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum numbers of effluent portions, and the sample holding time, are waived during that sampling period. However, the permittee must have collected an effluent composite sample volume sufficient to complete the required toxicity tests with renewal of the effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report.
- 5) The effluent samples shall not be dechlorinated after sample collection.

3. **Reporting**

All reports, tables, plans, summaries, and related correspondence required in any Part of this Section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division. All DMRs, including DMRs with biomonitoring data, should be sent to the Enforcement Division (MC 224).

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this permit in accordance with the Report Preparation Section of "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition" (EPA-821-R-02-013), or the most recent update, for every valid and invalid toxicity test initiated

whether carried to completion or not. All full reports shall be retained for 3 years at the plant site and shall be available for inspection by TCEQ personnel.

- b. A full report must be submitted with the first valid biomonitoring test results for each test species and with the first test results any time the permittee subsequently employs a different test laboratory. Full reports need not be submitted for subsequent testing unless specifically requested. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit. All Table 1 reports must include the information specified in the Table 1 form attached to this permit.
- 1) Annual biomonitoring test results are due on or before January 20th for biomonitoring conducted during the previous 12 month period.
 - 2) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6 month period.
 - 3) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th, for biomonitoring conducted during the previous calendar quarter.
 - 4) Monthly biomonitoring test results are due on or before the 20th day of the month following sampling.
- c. Enter the following codes on the DMR for the appropriate parameters for valid tests only:
- 1) For the water flea, Parameter TLP3B, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
 - 2) For the water flea, Parameter TOP3B, report the NOEC for survival.
 - 3) For the water flea, Parameter TXP3B, report the LOEC for survival.
 - 4) For the water flea, Parameter TWP3B, enter a "1" if the NOEC for reproduction is less than the critical dilution; otherwise, enter a "0."
 - 5) For the water flea, Parameter TPP3B, report the NOEC for reproduction.
 - 6) For the water flea, Parameter TYP3B, report the LOEC for reproduction.
 - 7) For the fathead minnow, Parameter TLP6C, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
 - 8) For the fathead minnow, Parameter TOP6C, report the NOEC for survival.
 - 9) For the fathead minnow, Parameter TXP6C, report the LOEC for survival.
 - 10) For the fathead minnow, Parameter TWP6C, enter a "1" if the NOEC for growth is less than the critical dilution; otherwise, enter a "0."
 - 11) For the fathead minnow, Parameter TPP6C, report the NOEC for growth.
 - 12) For the fathead minnow, Parameter TYP6C, report the LOEC for growth.

d. Enter the following codes on the DMR for retests only:

- 1) For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
- 2) For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

4. Persistent Toxicity

The requirements of this Part apply only when a test demonstrates a significant effect at the critical dilution. A significant effect is defined as a statistically significant difference, at the 95% confidence level, between a specified endpoint (survival, growth, or reproduction) of the test organism in a specified effluent dilution when compared to the specified endpoint of the test organism in the control. Significant lethality is defined as a statistically significant difference in survival at the critical dilution when compared to the survival of the test organism in the control. Significant sublethality is defined as a statistically significant difference in growth/reproduction at the critical dilution when compared to the growth/reproduction of the test organism in the control.

- a. The permittee shall conduct a total of 2 additional tests (retests) for any species that demonstrates a significant effect (lethal or sublethal) at the critical dilution. The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test. The retests shall also be reported on the DMRs as specified in Part 3.d.
- b. If the retests are performed due to a demonstration of significant lethality, and one or both of the two retests specified in item 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5. The provisions of item 4.a. are suspended upon completion of the two retests and submittal of the TRE Action Plan and Schedule defined in Part 5.

If neither test demonstrates significant lethality and the permittee is testing under the reduced testing frequency provision of Part 1.e., the permittee shall return to a quarterly testing frequency for that species.

- c. If the two retests are performed due to a demonstration of significant sublethality, and one or both of the two retests specified in item 4.a. demonstrates significant lethality, the permittee shall again perform two retests as stipulated in item 4.a.
- d. If the two retests are performed due to a demonstration of significant sublethality, and neither test demonstrates significant lethality, the permittee shall continue testing at the quarterly frequency until such time that the permittee can invoke the reduced testing frequency provision specified in Part 1.e.
- e. Regardless of whether retesting for lethal or sublethal effects, or a combination of the two, no more than one retest per month is required for a species.

5. Toxicity Reduction Evaluation

- a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a General Outline for initiating a Toxicity Reduction Evaluation (TRE). The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if

needed), a discussion of influent and/or effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

- b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE Action Plan and Schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analysis to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE Action Plan shall lead to the successful elimination of significant lethality for both test species defined in item 1.b. As a minimum, the TRE Action Plan shall include the following:
- 1) **Specific Activities** - The TRE Action Plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and/or alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled, "Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA/600/6-91/005F), or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled, "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;
 - 2) **Sampling Plan** - The TRE Action Plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures, and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity;
 - 3) **Quality Assurance Plan** - The TRE Action Plan should address record keeping and data evaluation; calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, as well as mechanisms to detect artifactual toxicity; and
 - 4) **Project Organization** - The TRE Action Plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE Action Plan and Schedule, the permittee shall implement the TRE with due diligence.
- d. The permittee shall submit quarterly TRE Activities Reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

- 1) results and interpretation of any chemical-specific analyses for the identified and/or suspected pollutant(s) performed during the quarter;
- 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
- 3) any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
- 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
- 5) any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and
- 6) any changes to the initial TRE Plan and Schedule that are believed necessary as a result of the TRE findings.

Copies of the TRE Activities Report shall also be submitted to the U.S. EPA Region 6 office.

- e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species; testing for the less sensitive species shall continue at the frequency specified in Part 1.b.
- f. If the effluent ceases to effect significant lethality (herein as defined below) the permittee may end the TRE. A "cessation of lethality" is defined as no significant lethality for a period of 12 consecutive months with at least monthly testing. At the end of the 12 months, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b. The permittee may only apply the "cessation of lethality" provision once.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. "Corrective actions" are herein defined as proactive efforts which eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and/or effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and/or an appropriate control measure.

- g. The permittee shall complete the TRE and submit a Final Report on the TRE Activities no later than 28 months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in their pursuit of the TIE/TRE and must prove that circumstances beyond their control stalled the TIE/TRE.

The report shall provide information pertaining to the specific control mechanism(s) selected that will, when implemented, result in reduction of effluent toxicity to no significant lethality at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism(s).

A copy of the TRE Final Report shall also be submitted to the U.S. EPA Region 6 office.

- h. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, to require a compliance schedule for implementation of corrective actions, to specify a WET limit, to specify a BMP, and/or to specify CS limits.

BIOMONITORING REPORTING

Dates and Times Composites Collected	Date		Time	
	No. 1	FROM:	No. 2	TO:

Dilution water used: Receiving water Synthetic Dilution water

[illegible]

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TABLE 1 (SHEET 2 OF 4)

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION TEST

1. 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 number of young produced per adult significantly less ($p=0.05$) than the number of young per adult in the control for the % effluent corresponding to significant nonlethal effects?

CRITICAL DILUTION (63%): _____ YES _____ NO

PERCENT SURVIVAL

Time of Reading	Percent effluent (%)					
	0%	27%	35%	47%	63%	84%
24h						
48h						
End of test						

2. Fisher's Exact Test:

Is the mean survival at test end significantly less ($p=0.05$) than the control survival for the % effluent corresponding to lethality?

CRITICAL DILUTION (63%): _____ YES _____ NO

3. Enter percent effluent corresponding to each NOEC/LOEC below:

a.) NOEC survival = _____ % effluent

b.) LOEC survival = _____ % effluent

c.) NOEC reproduction = _____ % effluent

d.) LOEC reproduction = _____ % effluent

TABLE 1 (SHEET 3 OF 4)

BIOMONITORING REPORTING

FATHEAD MINNOW LARVAE GROWTH AND SURVIVAL

Dates and Times
Composites
Collected

No. 1 FROM: Date Time TO: Date Time

No. 2 FROM: TO:

No. 3 FROM: TO:

Test initiated: am/pm date

Dilution water used: Receiving water Synthetic dilution water

FATHEAD MINNOW GROWTH DATA

Effluent Concentration (%)	Average Dry Weight in milligrams in replicate chambers					Mean Dry Weight	CV%
	A	B	C	D	E		
0%							
29%							
35%							
47%							
63%							
84%							
PM8D							

* Coefficient of Variation = standard deviation x 100/mean

1. Dunnét'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 ($p=0.05$) than the control's dry weight (growth) for the % effluent corresponding to significant nonlethal effects?

CRITICAL DILUTION (63%): YES NO

TABLE 1 (SHEET 4 OF 4)

BIOMONITORING REPORTING
FATHEAD MINNOW GROWTH AND SURVIVAL TEST

FATHEAD MINNOW SURVIVAL DATA

Effluent Concentration	Percent Survival in replicate chambers					Mean percent survival			CV%
	A	B	C	D	E	24h	48h	7 day	

* Coefficient of Variation = standard deviation x 100/mean

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 ($p=0.05$) than the control survival for the % effluent corresponding to lethality?

CRITICAL DILUTION (63%): _____ YES _____ NO

3. 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

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 001 for whole effluent toxicity testing (biomonitoring)

1. Scope, Frequency and Methodology

- a. The permittee shall test the effluent for lethality in accordance with the provisions in this Section. Such testing will determine compliance with the Surface Water Quality Standard, 307.6(e)(2)(B), of greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.
- b. The toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests utilizing the test organisms, procedures, and quality assurance requirements specified in this section of the 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 the most recent update thereof:
 - 1) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and in 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 in each dilution.

A valid test result must be submitted for each reporting period. The permittee must report, and then repeat, an invalid test during the same reporting period. The repeat test shall include the control and the 100% effluent dilution and use the appropriate number of organisms and replicates, as specified above. An invalid test is herein defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

- c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. The control and/or dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.
 - d. This permit may be amended to require a Whole Effluent Toxicity (WET) limit, a Best Management Practice (BMP), Chemical-Specific (CS) limits, additional toxicity testing, and/or other appropriate actions to address toxicity. The permittee may be required to conduct additional biomonitoring tests and/or a Toxicity Reduction Evaluation (TRE) if biomonitoring data indicate multiple numbers of unconfirmed toxicity events.
- 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. Dilution Water - In accordance with item 1.c., the control and/or dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.
 - c. Samples and Composites

- 1) The permittee shall collect one flow-weighted 24-hour composite sample from Outfall 001. A 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined proportional to flow, or a sample continuously collected proportional to flow over a 24-hour operating day.
- 2) The permittee shall collect the 24-hour composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance discharged on an intermittent basis.
- 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the 24-hour composite sample. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.
- 4) If Outfall 001 ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report required in Part 3 of this Section.
- 5) The effluent samples shall not be dechlorinated after sample collection.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required in any Part of this Section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division. All DMRs, including DMRs with biomonitoring data, should be sent to the Enforcement Division (MC 224).

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this permit in accordance with the Report Preparation Section of "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition" (EPA-821-R-02-012), or the most recent update thereof, for every valid and invalid toxicity test initiated. All full reports shall be retained for 3 years at the plant site and shall be available for inspection by TCEQ personnel.
- b. A full report must be submitted with the first valid biomonitoring test results for each test species and with the first test results any time the permittee subsequently employs a different test laboratory. Full reports need not be submitted for subsequent testing unless specifically requested. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit. All Table 2 reports must include the information specified in the Table 2 form attached to this permit.
 - 1) Semiannual biomonitoring test results are due on or before January 20th and July 20th for biomonitoring conducted during the previous 6 month period.
 - 2) Quarterly biomonitoring test results are due on or before January 20th, April 20th, July 20th, and October 20th, for biomonitoring conducted during the previous calendar quarter.
- c. Enter the following codes on the DMR 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 a "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 a "1."

d. Enter the following codes on the DMR for retests only:

- 1) For retest number 1, Parameter 22415, 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 retest number 2, Parameter 22416, 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."

4. Persistent Mortality

The requirements of this Part apply when a toxicity test demonstrates significant lethality, here defined as a mean mortality of 50% or greater to organisms exposed to the 100% effluent concentration after 24-hours.

- a. The permittee shall conduct 2 additional tests (retests) for each species that demonstrates significant lethality. The two retests shall be conducted once per week for 2 weeks. Five effluent dilution concentrations in addition to an appropriate control shall be used in the retests. These additional effluent concentrations are 6%, 13%, 25%, 50% and 100% effluent. The first retest shall be conducted within 15 days of the laboratory determination of significant lethality. All test results shall be submitted within 20 days of test completion of the second retest. Test completion is defined as the 24th hour. The retests shall also be reported on the DMRs as specified in Part 3.d.
- b. If one or both of the two retests specified in item 4.a. demonstrates significant lethality, the permittee shall initiate the TRB requirements as specified in Part 5 of this Section.

5. Toxicity Reduction Evaluation

- a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a General Outline for initiating a Toxicity Reduction Evaluation (TRE). The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and/or effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.
- b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE Action Plan and Schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analysis to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE Action Plan shall lead to the successful elimination of significant lethality for both test species defined in item 1.b. As a minimum, the TRE Action Plan shall include the following:
 - 1) Specific Activities - The TRE Action Plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and/or alternative approaches.

When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled, "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003), or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled, "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

- 2) **Sampling Plan** - The TRE Action Plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures, and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity;
 - 3) **Quality Assurance Plan** - The TRE Action Plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, as well as mechanisms to detect artifactual toxicity; and
 - 4) **Project Organization** - The TRE Action Plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE Action Plan and Schedule, the permittee shall implement the TRE with due diligence.
- d. The permittee shall submit quarterly TRE Activities Reports concerning the progress of the TRE. The quarterly TRE Activities Reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:
- 1) results and interpretation of any chemical-specific analyses for the identified and/or suspected pollutant(s) performed during the quarter;
 - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
 - 3) any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
 - 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
 - 5) any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to eliminate significant lethality; and

- 6) any changes to the initial TRE Plan and Schedule that are believed necessary as a result of the TRE findings.

Copies of the TRE Activities Report shall also be submitted to the U.S. EPA Region 6 office.

- e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species; testing for the less sensitive species shall continue at the frequency specified in Part 1.b.
- f. If the effluent ceases to effect significant lethality (herein as defined below) the permittee may end the TRE. A "cessation of lethality" is defined as no significant lethality for a period of 12 consecutive weeks with at least weekly testing. At the end of the 12 weeks, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b. The permittee may only apply the "cessation of lethality" provision once.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. "Corrective actions" are herein defined as proactive efforts which eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and/or effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and/or an appropriate control measure.

- g. The permittee shall complete the TRE and submit a Final Report on the TRE Activities no later than 18 months from the last test day of the retest that demonstrates significant lethality. The permittee may petition the Executive Director (in writing) for an extension of the 18-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in their pursuit of the TIE/TRE and must prove that circumstances beyond their control stalled the TIE/TRE. The report shall specify the control mechanism(s) that will, when implemented, reduce effluent toxicity as specified in item 5.g. The report will also specify a corrective action schedule for implementing the selected control mechanism(s). A copy of the TRE Final Report shall also be submitted to the U.S. EPA Region 6 office.
- h. Within 3 years of the last day of the test confirming toxicity, the permittee shall comply with 307.6.(e)(2)(B), which requires greater than 50% survival of the test organism in 100% effluent at the end of 24-hours. The permittee may petition the Executive Director (in writing) for an extension of the 3-year limit. However, to warrant an extension the permittee must have demonstrated due diligence in their pursuit of the TIE/TRE and must prove that circumstances beyond their control stalled the TIE/TRE.

The requirement to comply with 307.6.(e)(2)(B) may be exempted upon proof 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. Following the exemption, the permit may be amended to include an ion-adjustment protocol, alternate species testing, or single species testing.

- i. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements where necessary, to require a compliance schedule for implementation of corrective actions, to specify a WBT limit, to specify a BMP, and/or to specify a CS limit.

TABLE 2 (SHEET 1 OF 2)

WATER FLEA SURVIVAL

GENERAL INFORMATION

		Sample (mL)	Date
Composite Sample Collected			
Test Initiated			

PERCENT SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	5%	15%	25%	50%	100%
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)
FATHEAD MINNOW SURVIVAL

GENERAL INFORMATION

	Station	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent Effluent (%)					
		0%	5%	15%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____ % effluent