

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Zak Covar, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 27, 2015

Bridget C. Bohac, Chief Clerk
Texas Commission on Environmental Quality
Office of the Chief Clerk (MC-
105) P.O. Box 13087
Austin, Texas 78711-3087

Re: **New Braunfels Utilities**
TPDES Permit No. WQ0010232002
TCEQ Docket No. 2015-0840-MWD

Dear Ms. Bohac,

Enclosed please find the original and seven (7) copies of the Executive Director's Response to Request for Hearing in the above-entitled matter.

Sincerely,

A handwritten signature in black ink that reads "Michael T. Parr II". The signature is written in a cursive style and is positioned above a horizontal line.

Michael T. Parr II, *Staff Attorney*
Environmental Law Division
State Bar No. 24062936

cc: Mailing List

Enclosure

TCEQ DOCKET NUMBER 2015-0840-MWD

**APPLICATION by
NEW BRAUNFELS
UTILITIES for
TPDES Permit No.
WQ0010232002**

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**BEFORE THE
TEXAS
COMMISSION ON
ENVIRONMENTAL
QUALITY**

EXECUTIVE DIRECTOR'S RESPONSE TO HEARING REQUESTS

I. Introduction

The Executive Director (ED) of the Texas Commission on Environmental Quality (the commission or TCEQ) files this Response to Hearing Requests (Response) on the application by New Braunfels Utilities (Applicant) for a Major Amendment with Renewal to Texas Pollutant Discharge Elimination System (TPDES) Permit, proposed permit No. WQ0010232002. Brad Bechtol, Scott Roots, Skylar Koepp, and Harvey and Josephine Heideman all submitted timely written requests for a contested case hearing (CCH).

Attached for Commission consideration are the following:

- Attachment A - Technical Summary & Draft Permit
- Attachment B - ED's Response to Comments (RTC)
- Attachment C - Compliance History
- Attachment D - ED's GIS Map

II. Description of the Facility

The Gruene Road Water Reclamation and Wastewater Treatment Facility (Proposed Facility) will be located on a 30 acre site located on the northeast corner of the intersection of Highway 46 (Loop 337) and Gruene Road, approximately 1.8 miles northwest of Interstate Highway 35 on Highway 46 in Comal County, Texas 78130. The proposed facility will be an activated sludge process plant operated in the complete mix mode. Treatment units in all phases include bar screens, an aerated grit chamber, aeration basins, clarifiers, aerobic sludge digester, sludge thickeners, sludge drying beds, chlorine contact chamber, Ultraviolet Light (UV) system, and dechlorination chamber.

The proposed permit authorizes a registered transporter to haul sludge generated at the facility for disposal to a TCEQ permitted landfill, Mesquite Creek Landfill, Permit No. MSW-66B, in Comal and Guadalupe County. The proposed permit also authorizes the disposal of sludge at a TCEQ authorized land application site or co-disposal landfill.

If the Commission issues the proposed permit, the discharge of treated domestic wastewater will enter directly into the Guadalupe River below Canyon Dam in Segment No. 1812 of the Guadalupe River Basin. The designated uses for Segment No. 1812 are exceptional aquatic life use, aquifer protection, public water supply, and primary contact recreation. Segment No. 1812 does not appear on the State's inventory of impaired and threatened waters (the 2012 Clean Water Act Section 303(d) list).

In accordance with 30 TAC § 307.5 of the Texas Surface Water Quality Standards (TSWQS) and the Procedures to Implement the TSWQS, June 2010 (June 2010 IPs),¹ Antidegradation reviews of the receiving waters were performed. The Tier 1 Antidegradation review preliminarily determined that no impairment of existing water quality uses would result from this permitting action, as the TCEQ expects the proposed permit to maintain the numerical and narrative criteria protecting the existing uses. Because the Tier 1 review preliminarily determined that the stream reach assessed contained water bodies with an exceptional aquatic life use, the TCEQ performed a Tier 2 Antidegradation review. The Tier 2 review preliminarily determined that no significant degradation of water quality is expected in the Guadalupe River below Canyon Dam (Segment No. 1812), because the TCEQ expects the proposed permit to protect and maintain the existing uses. This determination is preliminary and subject to additional review and revisions if the TCEQ receives new information.

III. Procedural Background

The TCEQ received the application for a new TPDES permit on March 26, 2014, and declared it Administratively Complete on April 22, 2014. The Applicant published the Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) in Comal County, Texas in English on May 11, 2014 in the *New Braunfels Herald-Zeitung*, and in Spanish on May 26, 2014 in *La Voz*. The ED completed the technical review of the

¹ "*Procedures to Implement the Texas Surface Water Quality Standards*," June 2010.

application on October 21, 2014, and prepared the proposed permit, which if approved, would establish the conditions under which the facility must operate. The Applicant published the Notice of Application and Preliminary Decision for a Water Quality Permit (NAPD) in Comal County, Texas in English on January 11, 2015 in the *New Braunfels Herald-Zeitung* and in Spanish on January 7, 2015 in *La Prensa De San Antonio*. The public comment period closed on February 10, 2015, and the ED's Response to Comment was filed on April 17, 2015. Because this application was administratively complete on or after September 1, 1999, it is subject to procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999.

IV. Evaluation of Hearing Requests

House Bill 801 established statutory procedures for public participation in certain environmental permitting proceedings. For those applications declared administratively complete on or after September 1, 1999, it established new procedures for providing public notice and public comment, and for the Commission's consideration of hearing requests. This application was declared administratively complete on April 22, 2014, and therefore, is subject to the HB 801 requirements. The Commission implemented HB 801 by adopting procedural rules in Title 30 of the Texas Administrative Code (30 TAC) chapters 39, 50, and 55. The regulations governing requests for CCH are found at 30 TAC Chapter 55.

A. *Legal Authority to Respond to Hearing Requests*

"The Executive Director, the public interest counsel, and applicant may submit written responses to [hearing] requests" ²

Responses to hearing requests must specifically address:

- (a) whether the requestor is an affected person;
- (b) whether issues raised in the hearing request are disputed;
- (c) whether the dispute involves questions of fact or law;
- (d) whether the issues were raised during the public comment period;
- (e) whether the hearing request is based on issues raised solely in a public comment withdrawn by the commenter in writing by filing a withdrawal letter with the

² 30 TAC §55.209(d).

- chief clerk prior to the filing of the Executive Director's Response to Comment;
- (f) whether the issues are relevant and material to the decision on the application; and
 - (g) a maximum expected duration for the contested case hearing.³

B. Hearing Request Requirements

In order for the Commission to consider a hearing request, the Commission must first determine whether the request meets certain requirements.

A request for a contested case hearing by an affected person must be in writing, must be filed with the chief clerk within the time provided . . . and may not be based on an issue that was raised solely in a public comment withdrawn by the commenter in writing by filing a withdrawal letter with the chief clerk prior to the filing of the Executive Director's Response to Comment.⁴

A hearing request must substantially comply with the following:

- (1) give the name, address, daytime telephone number, and where possible, fax number of the person who files the request. If the request is made by a group or association, the request must identify one person by name, address, daytime telephone number, and where possible, fax number, who shall be responsible for receiving all official communications and documents for the group;
- (2) identify the person's justiciable interest affected by the application, including a brief, but specific, written statement explaining in plain language the requestor's location and distance relative to the proposed facility or activity that is the subject of the application and how and why the requestor believes he or she will be adversely affected by the proposed facility or activity in a manner not common to members of the general public;
- (3) request a contested case hearing
- (4) list all relevant and material disputed issues of fact that were raised during the public comment period and that are the basis of the hearing request.
To facilitate the commission's determination of the number and scope of issues to be referred to hearing, the requestor should, to the extent possible, specify any of the executive director's responses to comments that the requestor disputes and the factual basis of the dispute and list any disputed issues of law or policy; and
- (5) provide any other information specified in the public notice of application⁵

C. Requirement that Requester be an Affected Person

³ 30 TAC §55.209(e).

⁴ 30 TAC §55.201(c).

⁵ 30 TAC §55.201(d).

In order to grant a contested case hearing, the commission must determine that a requestor is an affected person.

- (a) For any application, an affected person is one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application. An interest common to members of the general public does not qualify as a personal justiciable interest
- (b) Governmental entities, including local governments and public agencies with authority under state law over issues raised by the application may be considered affected persons
- (c) In determining whether a person is an affected person, all factors shall be considered, including, but not limited to, the following:
 - (1) whether the interest claimed is one protected by the law under which the application will be considered;
 - (2) distance restrictions or other limitations imposed by law on the affected interest;
 - (3) whether a reasonable relationship exists between the interest claimed and the activity regulated;
 - (4) likely impact of the regulated activity on the health and safety of the person, and on the use of property of the person;
 - (5) likely impact of the regulated activity on use of the impacted natural resource by the person; and
 - (6) for governmental entities, their statutory authority over or interest in the issues relevant to the application⁶

D. Referral to the State Office of Administrative Hearings

“When the commission grants a request for a contested case hearing, the commission shall issue an order specifying the number and scope of the issues to be referred to SOAH for a hearing.”⁷ “The commission may not refer an issue to SOAH for a contested case hearing unless the commission determines that the issue: (1) involves a disputed question of fact; (2) was raised during the public comment period; and (3) is relevant and material to the decision on the application.”⁸

V. Analysis of the Hearing Requests

⁶ 30 TAC § 55.203.

⁷ 30 TAC § 50.115(b).

⁸ 30 TAC § 50.115(c).

The ED analyzed the hearing requests to determine whether they complied with Commission rules, who qualified as an affected person, what issues ought to be referred for a contested case hearing, and the appropriate length of the hearing.

A. Whether the Requesters Complied With 30 TAC §§ 55.201(c) and (d).

The public comment period for this permit application ended on February 10, 2015, and the period for filing a timely CCH request ended on May 20, 2015. Brad Bechtol, Scott Roots, Skylar Koepf, and Harvey and Josephine Heideman all submitted timely written CCH requests that included relevant contact information and raised disputed issues.

The ED concludes that the CCH requests of Brad Bechtol, Scott Roots, Skylar Koepf, and Harvey and Josephine Heideman all substantially complied with 30 TAC §§ 55.201(c) and (d).

B. Whether the Requesters are Affected Persons

- 1. Brad Bechtol's** CCH request effectively identified a personal, justiciable interest affected by the application; explaining in plain language in a brief written statement his location and distance relative to the facility, the discharge route, and how he would be personally affected by the proposed activity in a manner not common to members of the public.

The adjacent landowners' list and map identifies Mr. Bechtol as the owner of property #6 on the adjacent landowners' map. Mr. Bechtol's CCH request raised the issues of the proposed discharge adversely affecting his use and enjoyment of property and recreating in the river, and states that he is an affected persons because his property is 1,100 feet downstream of the proposed discharge route. The proximity of Mr. Bechtol's property to the proposed discharge route and discharge point increases the likelihood that the proposed permit may personally affect Mr. Bechtol in a way not common to the public. Landowners who reside within a close proximity to a TCEQ authorized site are more able to show that a reasonable relationship exists between the personal interests the individuals seek to protect and the subject of the controversy, or that a specific geographic/causative nexus exists to satisfy the "fairly traceable" element of standing or affected person status.

According to the GIS map developed by the ED's staff, the Adjacent Landowner's map provided in the application, and the information and address provided in Mr. Bechtol's CCH request, Mr. Bechtol's property is located along the proposed discharge route and 1,100 feet downstream of the proposed outfall location. Based on the above information, the ED recommends finding Mr. Bechtol is an affected person because a reasonable relationship exists between his personal justiciable interests, related to his rights to use and enjoy his property free from adverse impacts to water quality and recreation in the river, and the activity regulated; the proposed discharge of treated domestic wastewater.

The ED recommends that the Commission find that Brad Bechtol is an affected person under 30 TAC § 55.203.

2. **Scott Roots'** CCH request effectively identified a personal, justiciable interest affected by the application; explaining in plain language in a brief written statement his location and distance relative to the facility, the discharge route, and how he would be personally affected by the proposed activity in a manner not common to members of the public.

The adjacent landowners' list and map identifies Mr. Roots as the owner of property #10 on the Adjacent Landowners' map. Mr. Roots' CCH request raised the issues of the proposed discharge adversely affecting his use and enjoyment of property and recreating in the river, and states that he is an affected persons because his property is 1,500 feet downstream of the proposed discharge route. The proximity of Mr. Roots' property to the proposed discharge route and discharge point increases the likelihood that the proposed permit may personally affect Mr. Roots in a way not common to the public. Landowners who reside within a close proximity to a TCEQ authorized site are more able to show that a reasonable relationship exists between the personal interests the individuals seek to protect and the subject of the controversy, or that a specific geographic/causative nexus exists to satisfy the "fairly traceable" element of standing or affected person status.

According to the GIS map developed by the ED's staff, the Adjacent Landowner's map provided in the application, and the information and address

provided in Mr. Roots' CCH request, Mr. Roots' property is located along the proposed discharge route and 1,500 feet downstream of the proposed outfall location. Based on the above information, the ED recommends finding Mr. Roots is an affected person because a reasonable relationship exists between his personal justiciable interests, related to his rights to use and enjoy his property free from adverse impacts to water quality and recreation in the river, and the activity regulated; the proposed discharge of treated domestic wastewater.

The ED recommends that the Commission find that Scott Roots is an Affected Person under 30 TAC § 55.203.

- 3. Harvey and Josephine Heideman's** CCH requests effectively identified a personal, justiciable interest affected by the application; explaining in plain language in a brief written statement their location and distance relative to the facility, the discharge route, and how they would be personally affected by the proposed activity in a manner not common to members of the public.

The adjacent landowners' list and map identifies Mr. Heideman as the owner of property #2 on the adjacent landowners' map. The Heideman's CCH requests raised the issues of the proposed discharge adversely affecting the use and enjoyment of their property and recreating in the river, and states they are affected persons because their property is 100 feet downstream of the proposed discharge route. The proximity of the Heideman's property to the proposed discharge route and discharge point increases the likelihood that the proposed permit may personally affect the Heidemans in a way not common to the public. Landowners who reside within a close proximity to a TCEQ authorized site are more able to show that a reasonable relationship exists between the personal interests the individuals seek to protect and the subject of the controversy, or that a specific geographic/causative nexus exists to satisfy the "fairly traceable" element of standing or affected person status.

According to the GIS map developed by the ED's staff, the Adjacent Landowner's map provided in the application, and the information and address provided in the Heideman's CCH requests, the Heideman's property is located along the proposed discharge route and 100 feet downstream of the proposed

outfall location. Based on the above information, the ED recommends finding that the Heidemans are affected persons because a reasonable relationship exists between their personal justiciable interests, related to their rights to use and enjoy their property free from adverse impacts to water quality and recreation in the river, and the activity regulated; the proposed discharge of treated domestic wastewater.

The ED recommends that the Commission find that Harvey and Josephine Heideman are Affected Persons under 30 TAC § 55.203.

4. **Skylar Koepp's** CCH request raised the issues of the proposed discharge adversely affecting their use and enjoyment of property and recreating in the river, and claims affected person status in conjunction with property #67 on the on the Adjacent Landowners' map provided in the application. According to the GIS map developed by the ED's staff, and the Adjacent Landowner's map, property #67 is located directly adjacent to the site of the proposed facility.

However, the Adjacent Landowner's list submitted with the application identifies the owner of property #67, as "Noland Koepp Et. Al.," and does not specifically identify any ownership by Skylar Koepp. The property address provided by Skylar Koepp is more than two miles northeast of the facility and is not in close proximity to the facility or adjacent to the discharge route. Members of the public who reside within a close proximity to a TCEQ authorized site are more able to show that a reasonable relationship exists between the personal interests sought to be protected and the subject of the controversy, or that a specific geographic/causative nexus exists to satisfy the "fairly traceable" element of standing or affected person status. The distance between the facility and the property address accompanying Skylar Koepp's CCH request decreases the likelihood that an individual will be personally affected in a way not common to the public. At this time, the ED is unable to recommend granting Skylar Koepp's request, unless more information is provided to establish Skylar Koepp's ownership in property #67, as it is currently listed under "Noland Koepp Et Al."

The ED recommends that the Commission find that Skylar Koepp is not an Affected Person under 30 TAC § 55.203.

C. Whether the Issues are Referable to SOAH

In addition to recommending to the Commission those persons who qualify as affected persons, the ED analyzes issues raised in accordance with the regulatory criteria. If the Commission considers an issue to be one of fact, rather than an issue of law or policy, it is appropriate for referral to hearing if it meets all other applicable requirements.⁹ In addition, to refer an issue to SOAH, the Commission must find that the issue is relevant and material to the Commission's decision to issue or deny a permit.¹⁰ Relevant and material issues are those governed by the substantive law under which the permit is to be issued.¹¹

(a) Issues raised in the Hearing Request:

The Following issues were raised in the Hearing Requests:

1. Whether the proposed discharge will adversely affect the use and enjoyment of neighboring properties, in particular recreational activities in the Guadalupe River below Canyon Dam (Segment. No. 1812).
(RTC Responses Nos. 1 & 2). This is an issue of fact. If it could be shown that the proposed discharge would adversely affect the use and enjoyment of neighboring properties, that information would be relevant and material to a decision on the application. The ED recommends referring this issue to SOAH.
2. Whether the proposed discharge will adversely affect water quality in the Guadalupe River Below Canyon Dam (Segment No. 1812) related to:
 - a. excess nutrients and algal blooms
 - b. possible chemical spills at the proposed facility
 - c. drinking water, as the proposed outfall would be closer to the City of New Braunfels' drinking water intake system(RTC Responses Nos. 2, 3, and 4). This is an issue of fact. If it could be shown that the proposed discharge would adversely affect water quality in the receiving waters, that information would be relevant and material to a decision on the application. The ED recommends referring this issue to SOAH.
3. Whether the effluent limitations in the proposed permit should require and maintain the same level of nutrient removal achieved under the existing permit.

⁹ 30 TAC §§ 55.201(c), (d)(4), and 55.211(c)(2)(A).

¹⁰ *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248-51 (1986) (discussing the standards applicable to reviewing motions for summary judgment the Court stated “[a]s to materiality, the substantive law will identify which facts are material ... it is the substantive law's identification of which facts are critical and which facts are irrelevant that governs”).

¹¹ *Id.*

(RTC Responses No. 9) This is an issue of fact. If it could be shown that the proposed effluent limitations should require the same level of nutrient removal as the existing effluent limits, that information would be relevant and material to a decision on the application. The ED recommends referring this issue to SOAH.

4. Whether the Tier 2 Antidegradation Review performed on the proposed permit violates the Anti-degradation standards of the Texas Surface Water Quality Standards (TSWQS).

(RTC Responses No. 5) This is an issue of fact. If it could be shown that the Tier 2 Antidegradation Review performed on proposed permit violates the TSWQS, that information would be relevant and material to a decision on the application. The ED recommends referring this issue to SOAH.

5. Whether the effluent limitations in the proposed permit address the authorized increase in flow and account for periods of low flow when the discharge is not diluted with river water.

(RTC Responses No. 10) This is an issue of fact. If it could be shown that the effluent limitations in the proposed permit do not address the authorized increase in flow and account for periods of low flow when the discharge is not diluted with river water, that information would be relevant and material to a decision on the application. The ED recommends referring this issue to SOAH

6. Whether the location of the Proposed Facility is suitable for a wastewater treatment plant and outfall.

(RTC Responses No. 7) This is an issue of fact. If it could be shown that the location of the proposed facility Is not suitable for a wastewater treatment plant and outfall, that information would be relevant and material to a decision on the application. The ED recommends referring this issue to SOAH

7. Whether the Applicant has demonstrated that the substantial increase in flow authorized by the proposed permit is warranted.

(RTC Responses No. 6) This is an issue of fact. If it could be shown that the Applicant has not demonstrated that the substantial increase in flow authorized by the proposed permit, is warranted, that information would be relevant and material to a decision on the application. The ED recommends referring this issue to SOAH

8. Whether the Applicant's compliance history justifies issuance of the proposed permit.

(RTC Responses No. 11) This is an issue of fact. If it could be shown that the Applicant's compliance history does not justify issuing the proposed permit, that information would be relevant and material to a decision on the application. The ED recommends referring this issue to SOAH

9. Whether the proposed facility and the proposed discharge would adversely affect property values.

(RTC Responses No. 9) This is an issue of fact not relevant and material to a decision on the application as the water quality permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters. The TCEQ does not have jurisdiction under the Texas Water Code or its regulations to address or consider property values or the marketability of adjacent property in its determination of whether or not to issue a water quality permit. The ED recommends not referring this issue.

(b) Issues recommended for Referral (Nos.1-8):

The ED recommends the following issues be referred to SOAH for a CCH.

1. Whether the proposed discharge will adversely affect the use and enjoyment of neighboring properties, in particular recreational activities in the Guadalupe River Below Canyon Dam (Segment. No. 1812).
2. Whether the proposed discharge will adversely affect water quality in the Guadalupe River Below Canyon Dam (Segment No. 1812) related to:
 - a. Excess nutrients and algal blooms
 - b. Possible chemical spills at the proposed facility
 - c. drinking water, as the proposed outfall would be closer to the City of New Braunfels' drinking water intake system
3. Whether the effluent limitations in the proposed permit should require and maintain the same level of nutrient removal achieved under the existing permit.
4. Whether the Tier 2 Antidegradation Review performed on the proposed permit violates the Anti-degradation standards of the Texas Surface Water Quality Standards (TSWQS). Specifically, the TSWQS do not distinguish between "degradation" and "significant degradation," further, the TSWQS require public notice whenever the TCEQ anticipates *any* (emphasis added) degradation. Therefore, a determination of whether the lowering of water quality "is necessary for important economic or social development" should have been done in conjunction with the Tier 2 Antidegradation Review performed on the proposed permit.
5. Whether the effluent limitations in the proposed permit are protective of water quality and address the authorized increase in flow and account for periods of low flow when the discharge is not diluted with river water.
6. Whether the location of the Proposed Facility is suitable for a wastewater treatment plant and outfall.
7. Whether the Applicant has demonstrated that the substantial increase in flow authorized by the proposed permit is warranted.

8. Whether the Applicant's compliance history justifies issuance of the proposed permit.

VI. Executive Director's Recommendation

The ED recommends the following actions by the Commission:

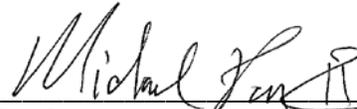
1. Find that Brad Bechtol, Scott Roots, and Harvey and Josephine Heideman are Affected Persons under 30 TAC § 55.203.
2. Find that Skylar Koepp is not an affected person, as the ED, at this time, is unable to recommend granting Skylar Koepp's CCH request. Skylar Koepp may submit the information needed to establish ownership of tract 67, however, currently that information is not present in the CCH request, and the Adjacent Landowner information submitted with the application lists as the property's owner, "Noland Koepp et al."
3. Grant the CCH Requests of Brad Bechtol, Scott Roots, and Harvey and Josephine Heideman; and deny the CCH request of Skylar Koepp.
4. Refer the identified issues above in sections **(b)(1)-(8)** to SOAH for a contested case hearing lasting no longer than six months from the date of referral.

Respectfully submitted,

Texas Commission on Environmental Quality

Richard A. Hyde, P.E., Executive Director

Robert Martinez, Environmental Law
Division Director

By 

Michael T. Parr II, *Staff Attorney*

Environmental Law Division

State Bar No. 24062936

P.O. Box 13087, MC 173

Austin, Texas 78711-3087

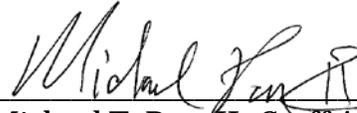
Telephone No. 512-239-0611

Facsimile No. 512-239-0606

REPRESENTING THE EXECUTIVE
DIRECTOR OF THE TEXAS COMMISSION
ON ENVIRONMENTAL QUALITY

CERTIFICATE OF SERVICE

I certify that on July 27, 2015 the original and seven true and correct copies of the Executive Director's Response to Hearing Request on the application by New Braunfels Utilities for a Major Amendment with Renewal to TPDES Permit, proposed permit No. WQ0010232002 were filed with the Chief Clerk of the TCEQ and a copy was served to all persons listed on the attached mailing list via hand delivery, electronic delivery, inter-agency mail, or by deposit in the U.S. Mail.



Michael T. Parr II, *Staff Attorney*
Environmental Law Division
State Bar No. 24062936

MAILING LIST
NEW BRAUNFELS UTILITIES
DOCKET NO. 2015-0840-MWD; PERMIT NO. WQ0010232002

FOR THE APPLICANT:

Via electronic mail:

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FOR THE EXECUTIVE DIRECTOR

Via electronic mail:

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Brian Christian, Director
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FOR PUBLIC INTEREST COUNSEL:

Via electronic mail:

Vic Mcwherter, Public Interest Counsel
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Public Interest Counsel, MC-103
P.O. Box 13087
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Tel: (512) 239-6363
Fax: (512) 239-6377

FOR ALTERNATIVE DISPUTE

RESOLUTION: Via electronic mail:

Kyle Lucas Texas Commission on Environmental
Quality Alternative Dispute Resolution, MC-222
P.O. Box 13087
Austin, Texas 78711-3087
Tel: (512) 239-4010 Fax: (512) 239-4015

FOR THE CHIEF CLERK:

Bridget C. Bohac
Texas Commission on Environmental Quality
Office of Chief Clerk, MC-105
P.O. Box 13087
Austin, Texas 78711-3087
Tel: (512) 239-3300
Fax: (512) 239-3311

**REQUESTER(S) / INTERESTED
PERSON(S):**

See attached list.

REQUESTER(S)

MR BRAD BECHTOL
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NEW BRAUNFELS TX 78130-3417

HARVEY HEIDEMAN
896 MARY PREISS DR
NEW BRAUNFELS TX 78132-4073

JOSEPHINE HEIDEMAN
896 MARY PREISS DR
NEW BRAUNFELS TX 78132-4073

SKYLAR KOEPP
2891 HUNTER RD
NEW BRAUNFELS TX 78132-4222

MR SCOTT ROOTS
1033 RIVER TER
NEW BRAUNFELS TX 78130-3417

INTERESTED PERSON(S)

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PO BOX 684881
AUSTIN TX 78768-4881

DIMICK
594 ROCK ST
NEW BRAUNFELS TX 78130-4052

DENNIS LEE EZELL
887 ROCK ST
NEW BRAUNFELS TX 78130-3357

DAN R LAROE, JR
270 CAMP PORTER RD
NEW BRAUNFELS TX 78130-1801

JOY E MARTINKA
934 ALBERT ST
NEW BRAUNFELS TX 78130-3346

ATTACHMENT A

FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

For draft Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010232002, TX0070939 to discharge to water in the State.

Issuing Office: Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Applicant: New Braunfels Utilities
263 Main Plaza
New Braunfels, Texas 78130

Prepared By: Sonia Bhuiya
Municipal Permits Team
Wastewater Permitting Section (MC 148)
Water Quality Division
(512) 239-1205

Date: September 24, 2014

Permit Action: Major Amendment with Renewal

1. EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit includes an expiration date of **February 01, 2020**, according to 30 Texas Administrative Code (TAC) § 305.71, Basin Permitting.

2. APPLICANT ACTIVITY

New Braunfels Utilities has applied for a major amendment to TPDES Permit No. WQ0010232002 to authorize the relocation of the wastewater treatment plant, relocation of outfall, and to authorize an increase in the discharge of treated domestic wastewater from an annual average flow not to exceed 1.1 million gallons per day (MGD) to an annual average flow not to exceed 4.9 MGD. The facility is operating in the Interim I phase (1.1 MGD) and an Interim II phase (2.5 MGD) and Final phase (4.9) have been added in the draft permit.

3. FACILITY AND DISCHARGE LOCATION

The existing facility is located approximately 700 feet southwest of the crossing of Gruene Loop Road over the Guadalupe River, in Comal County, Texas 78131. The new domestic wastewater treatment facility will be located on a 30.1 acre tract on the northeast corner of the intersection of Highway 46 (Loop 337) and Gruene Road, approximately 1.8 miles northwest of Interstate Highway 35 on Highway 46 in Comal County, Texas 78130.

The treated effluent is discharged directly to Guadalupe River Below Canyon Dam in

Segment No. 1812 of the Guadalupe River Basin. The designated uses for Segment No. 1812 are exceptional aquatic life use, aquifer protection, public water supply, and primary contact recreation.

4. TREATMENT PROCESS DESCRIPTION AND SEWAGE SLUDGE DISPOSAL

The Gruene Road Water Reclamation Facility Wastewater Treatment Facility in both phases is an activated sludge process plant operated in the complete mix mode. Treatment units all phases include bar screen, aerated grit chamber, aeration basins, clarifiers, aerobic sludge digester, sludge thickeners, sludge drying beds, chlorine contact chamber, Ultraviolet Light (UV) system, and dechlorination chamber. The facility is operating in the interim phase.

Sludge generated from the treatment facility is hauled by a registered transporter and disposed of at a TCEQ permitted landfill, Mesquite Creek Landfill, Permit No. MSW-66B, in Comal and Guadalupe County. The draft permit authorizes the disposal of sludge at a TCEQ authorized land application site or co-disposal landfill.

5. INDUSTRIAL WASTE CONTRIBUTION

The draft permit includes pretreatment requirements that are appropriate for a facility of this size and complexity. The facility does not appear to receive significant industrial wastewater contributions. The applicant stated in electronic correspondence dated September 18, 2014, that no industrial uses is accepted to discharge in future.

6. SUMMARY OF SELF-REPORTED EFFLUENT ANALYSES

The following is a summary of the applicant's Monthly Effluent Report data for the period January 2008 through August 2014. The average of Daily Avg value is computed by the averaging of all 30-day average values for the reporting period for each parameter.

<u>Parameter</u>	<u>Average of Daily Avg</u>
Flow, MGD	0.5
CBOD ₅ , mg/l	3.5
TSS, mg/l	3.6
NH ₃ -N, mg/l	0.3
<i>E. coli</i> , CFU or MPN/100 ml	8.3

7. DRAFT PERMIT CONDITIONS AND MONITORING REQUIREMENTS

The effluent limitations and monitoring requirements for those parameters that are limited in the draft permit are as follows:

A. INTERIM I PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The annual average flow of effluent shall not exceed 1.1 million gallons per day (MGD); nor shall the average discharge during any two-hour period (2-hour peak) exceed 1,910 gallons per minute (gpm).

New Braunfels Utilities TPDES Permit No. WQ0010232002
 Fact Sheet and Executive Director's Preliminary Decision

<u>Parameter</u>	<u>30-Day Average</u>		<u>7-Day</u>	<u>Daily</u>
	<u>mg/l</u>	<u>lbs/day</u>	<u>Average</u> <u>mg/l</u>	<u>Maximum</u> <u>mg/l</u>
CBOD ₅	5	46	10	20
TSS	10	92	15	25
NH ₃ -N	3	28	6	10
DO (minimum)	4.0	N/A	N/A	N/A
<i>E. coli</i> , CFU or MPN/100 ml	126	N/A	N/A	399

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

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.

<u>Parameter</u>	<u>Monitoring Requirement</u>
Flow, MGD	Continuous
CBOD ₅	Two/week
TSS	Two/week
NH ₃ -N	Two/week
DO	Two/week
<i>E. coli</i>	One/week

B. INTERIM II PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The annual average flow of effluent shall not exceed 2.5 million gallons per day (MGD); nor shall the average discharge during any two-hour period (2-hour peak) exceed 6,944 gallons per minute (gpm).

<u>Parameter</u>	<u>30-Day Average</u>		<u>7-Day</u>	<u>Daily</u>
	<u>mg/l</u>	<u>lbs/day</u>	<u>Average</u> <u>mg/l</u>	<u>Maximum</u> <u>mg/l</u>
CBOD ₅	10	208	15	25
TSS	15	313	25	40
NH ₃ -N	3	63	6	10
Total Phosphorus	1.0	21	2	4
DO (minimum)	4.0	N/A	N/A	N/A
<i>E. coli</i> , CFU or MPN/100 ml	126	N/A	N/A	399

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no

discharge of visible oil.

The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

<u>Parameter</u>	<u>Monitoring Requirement</u>
Flow, MGD	Continuous
CBOD ₅	Two/week
TSS	Two/week
NH ₃ -N	Two/week
Total P	Two/week
DO	Two/week
<i>E. coli</i>	Daily

C. FINAL PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The annual average flow of effluent shall not exceed 4.9 million gallons per day (MGD); nor shall the average discharge during any two-hour period (2-hour peak) exceed 13, 611 gallons per minute (gpm).

<u>Parameter</u>	<u>30-Day Average</u>		<u>7-Day Average</u>	<u>Daily Maximum</u>
	<u>mg/l</u>	<u>lbs/day</u>	<u>mg/l</u>	<u>mg/l</u>
CBOD ₅	10	409	15	25
TSS	15	613	25	40
NH ₃ -N	3	123	6	10
Total Phosphorus	0.5	20	1	2
DO (minimum)	4.0	N/A	N/A	N/A
<i>E. coli</i> , CFU or MPN/100 ml	126	N/A	N/A	399

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

<u>Parameter</u>	<u>Monitoring Requirement</u>
Flow, MGD	Continuous
CBOD ₅	Two/week
TSS	Two/week
NH ₃ -N	Two/week
Total P	Two/week
DO	Two/week
<i>E. coli</i>	Daily

D. SEWAGE SLUDGE REQUIREMENTS

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. Sludge generated from the treatment facility is hauled by a registered transporter and disposed of at a TCEQ permitted landfill, Mesquite Creek Landfill, Permit No. MSW-66B, in Comal and Guadalupe County. The draft permit authorizes the disposal of sludge at a TCEQ authorized land application site or co-disposal landfill.

E. PRETREATMENT REQUIREMENTS

Permit requirements for pretreatment are based on TPDES regulations contained in 30 TAC Chapter 315, which references 40 CFR Part 403, "General Pretreatment Regulations for Existing and New Sources of Pollution." [*rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798*]. The permit includes specific requirements that establish responsibilities of local government, industry, and the public to implement the standards to control pollutants which pass through or interfere with treatment processes in publicly owned treatment works or which may contaminate the sewage sludge.

The permittee has a pretreatment program which was approved by the U.S. Environmental Protection Agency (EPA) on **December 4, 1992**, and modified on **September 30, 1993**, and **August 19, 2011**. This permit has appropriate pretreatment language for a facility of this size and complexity. The permittee is required, under the conditions of the approved pretreatment program, to prepare annually a list of industrial users which during the preceding twelve months were in significant noncompliance with applicable pretreatment requirements for those facilities covered under the program. This list is to be published annually during the month of December in a newspaper of general circulation that provides meaningful public notice within the jurisdiction(s) served by the publicly owned treatment works (POTW).

The permittee is under a continuing duty to: establish and enforce specific local limits to implement the provisions of 40 CFR §403.5, to develop and enforce local limits as necessary, and to modify the approved POTW pretreatment program as necessary to comply with federal, state, and local law, as amended. The permittee is required to effectively enforce such limits and to modify its 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.

The legal authority and the POTW's pretreatment program are not in compliance with current 40 CFR Part 403 regulations [*rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798*] and 30 TAC Chapter 315, as amended. The permittee has submitted a modification to their pretreatment program containing the required [i.e., more stringent] Streamlining Rule provisions to the TCEQ on December 20, 2011. The Executive Director is currently reviewing this modification. If after review of the 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) and/or §403.18(b)(3), the notification will include suggested revisions to bring the 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 accept, approve, or deny the permittee's modification submission, as applicable.

All of the changes related to the Streamlining Rule may be treated as non-substantial if the changes to a POTW's legal authority to incorporate the changes directly reflect the federal requirements. The current regulations provide that modifications that relax a POTW's legal authorities are substantial modifications "except for modifications that directly reflect a revision to [40 CFR] Part 403 or to 40 CFR Chapter I, subchapter N, and are reported pursuant to paragraph (d) of this section." See 40 CFR §403.18(b)(1). The EPA further "excludes from the definition of 'substantial modification' those changes in POTW legal authority that result in less prescriptive programs, but which directly reflect a revision to the Federal Pretreatment Regulations (for example, if the federal regulations are streamlined). See 40 CFR §403.18(b)(1). Such modifications would have already undergone public notice and comment when promulgated by EPA. As long as the POTW's local ordinance is revised to directly reflect the new federal requirements, further public notice would be unnecessary." [*Federal Register / Vol. 62 / July 17, 1997 / pages 38406, 38409*].

The approval authority, however, may treat such modifications as substantial when appropriate. 40 CFR §403.18(b)(7) authorizes the approval authority to designate modifications as substantial if the Approval Authority concludes that the modification could have a significant effect on POTW operation, could result in an increase in POTW pollutant loadings, or could result in less stringent requirements being imposed on Industrial Users [*Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60187*]. Substantial modifications will be approved in accordance with 40 CFR §403.18, and the modification will become effective upon approval by the Executive Director in accordance with 40 CFR §403.18.

The permittee is not required to submit a technical reassessment and certification for the existing technically based local limits (TBLLs) for the Gruene Road wastewater treatment facility; due to the absence of any significant industrial users discharging to the existing Gruene Road wastewater treatment facility.

F. WHOLE EFFLUENT TOXICITY (BIOMONITORING) REQUIREMENTS

- (1) The draft permit includes 7-day chronic freshwater biomonitoring requirements as follows. The permit requires five dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 2%, 3%, 5%, 6%, and 8%. The low-flow effluent concentration (critical dilution) is defined as 6% effluent.
 - (a) Chronic static renewal 7-day survival and reproduction test using the water flea (*Ceriodaphnia dubia*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a

testing frequency reduction.

- (b) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.
- (2) The draft permit includes the following minimum 24-hour acute freshwater biomonitoring requirements at a frequency of once per six months:
- (a) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*).
 - (b) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*).

G. BUFFER ZONE REQUIREMENTS

The permittee shall comply with the requirements of 30 TAC § 309.13 (a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e). The evidence of legal restrictions shall be submitted to the Executive Director in care of the TCEQ Wastewater Permitting Section (MC 148). The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). See Attachment A.

H. SUMMARY OF CHANGES FROM APPLICATION

See the next section for additional changes based on the existing permit.

I. SUMMARY OF CHANGES FROM EXISTING PERMIT

The Permittee has applied for a major amendment to authorize the relocation of the wastewater treatment plant, outfall, and to authorize an increase in the discharge of treated domestic wastewater from an annual average flow not to exceed 1,100,000 gallons per day to an annual average flow not to exceed 4,900,000 gallons per day. The facility is operating in the Interim I phase (1.1 MGD) and the Interim II phase (2.5 MGD) and Final phase (4.9 MGD) have been added in the draft permit.

The Total Phosphorus limit has been included in the Interim II and Final phases. The Total Phosphorus limit was not included in the Interim I phase since it is not be applicable at the existing facility.

The single grab or daily maximum bacteria limits have been changed from 394 *E. coli* CFU or MPN per 100 ml to 399 *E. coli* CFU or MPN per 100 ml, based on the EPA approved portions of the 2010 Texas Surface Water Quality Standards (TSWQS).

The Standard Permit Conditions, Sludge Provisions, Other Requirements, Pretreatment requirements, and Biomonitoring sections of the draft permit have been updated.

8. DRAFT PERMIT RATIONALE

A. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

Regulations promulgated in Title 40 of the Code of Federal Regulations (CFR) require technology-based limitations be placed in wastewater discharge permits based on effluent limitations guidelines, where applicable, and/or on best professional judgment (BPJ) in the absence of guidelines.

Effluent limitations for maximum and minimum pH are in accordance with 40 CFR § 133.102(c) and 30 TAC § 309.1(b).

B. WATER QUALITY SUMMARY AND COASTAL MANAGEMENT PLAN

(1) WATER QUALITY SUMMARY

The treated effluent is discharged directly to Guadalupe River Below Canyon Dam in Segment No. 1812 of the Guadalupe River Basin. The designated uses for Segment No. 1812 are exceptional aquatic life use, aquifer protection, public water supply, and primary contact recreation. The effluent limitations in the draft permit will maintain and protect the existing instream uses. In accordance with 30 Texas Administrative Code §307.5 and the TCEQ implementation procedures (June 2010) for the Texas Surface Water Quality Standards, an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in the Guadalupe River Below Canyon Dam, which has been identified as having exceptional aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received. All determinations are preliminary and subject to additional review and/or revisions.

A priority watershed of critical concern has been identified in Segment 1812 in Comal County. Therefore, the Peck's cave amphipod (*Stygobromus pecki*) has been determined to occur in the watershed of Segment 1812. To make this determination for Texas Pollutant Discharge Elimination System (TPDES) permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the TPDES (September 14, 1998, October 21, 1998 update). The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The presence of the endangered Peck's cave amphipod requires EPA review and, if appropriate, consultation with USFWS.

Segment No. 1812 is not currently listed on the State's inventory of impaired and threatened waters (the 2012 Clean Water Act §303(d) list).

The effluent limitations and conditions in the draft permit comply with the Texas Surface Water Quality Standards, 30 TAC §§ 307.1 - 307.10.

(2) CONVENTIONAL PARAMETERS

Effluent limitations for the conventional effluent parameters (i.e., Biochemical Oxygen Demand or Carbonaceous Biochemical Oxygen Demand, Ammonia Nitrogen, etc.) are based on stream standards and waste load allocations for water quality limited streams as established in the Texas Surface Water Quality Standards and the State of Texas Water Quality Management Plan (WQMP).

The effluent limits recommended above have been reviewed for consistency with the State of Texas Water Quality Management Plan (WQMP). The proposed limits for the new outfall are not contained in the approved WQMP. However, these limits will be included in the next WQMP update. A Waste Load Evaluation has not been prepared for Segment 1812.

The effluent limitations in the draft permit meet the requirements for secondary treatment and the requirements for disinfection according to 30 TAC Chapter 309, Subchapter A: Effluent Limitations.

(3) COASTAL MANAGEMENT PLAN

The facility is not located in the Coastal Management Program boundary.

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS

(1) GENERAL COMMENTS

The Texas Surface Water Quality Standards (30 TAC Chapter 307) state that "surface waters will not be toxic to man, or to terrestrial or aquatic life." The methodology outlined in the "Procedures to Implement the Texas Surface Water Quality Standards, June 2010" is designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health.

(2) AQUATIC LIFE CRITERIA

(a) SCREENING

Water quality-based effluent limitations are calculated from freshwater aquatic life criteria found in Table 1 of the Texas Surface Water Quality Standards (30 TAC Chapter 307).

Acute freshwater criteria are applied at the edge of the zone of initial

dilution (ZID) and chronic freshwater criteria are applied at the edge of the aquatic life mixing zone. The ZID for this discharge is defined as 20 feet upstream and 60 feet downstream from the point where the discharge enters Guadalupe River Below Canyon Dam. The aquatic life mixing zone for this discharge is defined as 100 feet upstream and 300 feet downstream from the point where the discharge enters Guadalupe River Below Canyon Dam.

TCEQ uses the mass balance equation to estimate dilutions at the edges of the ZID and aquatic life mixing zone during critical conditions. The estimated dilution at the edge of the aquatic life mixing zone is calculated using the final permitted flow of 4.9 MGD and the 7-day, 2-year (7Q2) flow of 112 cfs for Guadalupe River Below Canyon Dam. The estimated dilution at the edge of the ZID is calculated using the final permitted flow of 4.9 MGD and 25% of the 7Q2 flow. The following critical effluent percentages are being used:

Acute Effluent %:	21.31%	Chronic Effluent %:	6.34%
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Wasteload allocations (WLAs) are calculated using the above estimated effluent percentages, criteria outlined in the Texas Surface Water Quality Standards, and partitioning coefficients for metals (when appropriate and designated in the implementation procedures). The WLA is the end-of-pipe effluent concentration that can be discharged, when after mixing in the receiving stream; instream numerical criteria will not be exceeded. From the WLA, a long term average (LTA) is calculated using a log normal probability distribution, a given coefficient of variation (0.6), and a 90th percentile confidence level. The lower of the two LTAs (acute and chronic) is used to calculate a daily average and daily maximum effluent limitation for the protection of aquatic life using the same statistical considerations with the 99th percentile confidence level and a standard number of monthly effluent samples collected (12). Assumptions used in deriving the effluent limitations include segment values for hardness, chlorides, pH and Total Suspended Solids (TSS) according to the segment-specific values contained in the TCEQ guidance document, "Procedures to Implement the Texas Surface Water Quality Standards, June 2010." The segment values are 184 mg/l CaCO₃ for hardness, 14 mg/l Chlorides, 7.7 standard units for pH, and 2.0 mg/l for TSS. For additional details on the calculation of water quality-based effluent limitations, refer to the TCEQ guidance document.

TCEQ practice for determining significant potential is to compare the reported analytical data against percentages of the calculated daily average water quality-based effluent limitation. Permit limitations are required when analytical data reported in the application exceeds 85% of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application exceeds 70% of the calculated daily average water quality-based effluent limitation.

(b) PERMIT ACTION

Analytical data reported in the application was screened against calculated water quality-based effluent limitations for the protection of aquatic life. Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitation for aquatic life protection.

(3) AQUATIC ORGANISM BIOACCUMULATION CRITERIA

(a) SCREENING

Water quality-based effluent limitations for the protection of human health are calculated using criteria for the consumption of freshwater fish tissue and drinking water found in Table 2 of the Texas Surface Water Quality Standards (30 TAC Chapter 307). Freshwater fish tissue bioaccumulation and drinking water criteria are applied at the edge of the human health mixing zone. The human health mixing zone for this discharge is identical to the aquatic life mixing zone. TCEQ uses the mass balance equation to estimate dilution at the edge of the human health mixing zone during average flow conditions. The estimated dilution at the edge of the human health mixing zone is calculated using the final permitted flow of 4.9 MGD and the harmonic mean flow of 164 cfs for Guadalupe River Below Canyon Dam. The following critical effluent percentage is being used:

Human Health Effluent %: 4.42%

Water quality-based effluent limitations for human health protection against the consumption of fish tissue are calculated using the same procedure as outlined for calculation of water quality-based effluent limitations for aquatic life protection. A 99th percentile confidence level in the long term average calculation is used with only one long term average value being calculated.

Significant potential is again determined by comparing reported analytical data against 70% and 85% of the calculated daily average water quality-based effluent limitation.

(b) PERMIT ACTION

Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitation for human health protection.

(4) DRINKING WATER SUPPLY PROTECTION

(a) SCREENING

Water Quality Segment No.1812, which receives the discharge from this facility, is designated as a public water supply. The screening procedure

used to calculate water quality-based effluent limitations and determine the need for effluent limitations or monitoring requirements is identical to the procedure outlined in the aquatic organism bioaccumulation section of this fact sheet. Criteria used in the calculation of water quality-based effluent limitations for the protection of a drinking water supply are outlined in Table 2 (Water and Fish) of the Texas Surface Water Quality Standards (30 TAC Chapter 307). These criteria are developed from either drinking water maximum contaminant level (MCL) criteria outlined in 30 TAC Chapter 290 or from the combined human health effects of exposure to consumption of fish tissue and ingestion of drinking water.

(b) PERMIT ACTION

Criteria in the "Water and Fish" section of Table 2 do not distinguish if the criteria is based on a drinking water standard or the combined effects of ingestion of drinking water and fish tissue. Effluent limitations or monitoring requirements to protect the drinking water supply (and other human health effects) were previously calculated and outlined in the aquatic organism bioaccumulation criteria section of this fact sheet.

(5) WHOLE EFFLUENT TOXICITY (BIOMONITORING) CRITERIA

(a) SCREENING

TCEQ has determined that there may be pollutants present in the effluent that may have the potential to cause toxic conditions in the receiving stream. Whole effluent biomonitoring is the most direct measure of potential toxicity that incorporates the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity.

The existing permit includes 48-hour acute freshwater biomonitoring requirements. A summary of the biomonitoring testing for the facility indicates

In the past five years, the permittee performed twenty-one 48 hour acute tests, with zero demonstrations of significant toxicity (i.e., zero failures).

A reasonable potential (RP) determination was performed in accordance with 40 CFR §122.44(d)(1)(ii) to determine whether the discharge will reasonably be expected to cause or contribute to an exceedance of a state water quality standard or criterion within that standard. Each test species is evaluated separately. The RP determination is based on representative data from the previous five years of 48-hour acute WET testing. The table below identifies the number of test failures required to necessitate that a WET limit be placed in the permit or the consideration of additional Best Professional Judgment (BPJ) factors, such as the duration and magnitude of the failures.

WET REASONABLE POTENTIAL DETERMINATION THRESHOLDS
More than 3 failures in the past five years = WET limit
3 failures with 2 or 3 occurring in the past 3 years = WET limit
1 to 3 failures in the past five years but 1 or less in last 3 years = BPJ
0 failures = No limit

With zero failures by both test species, a determination of no RP was made. With no RP, WET limits are not required and both test species are eligible for the testing frequency reduction.

All test data results were used for this determination.

(b) PERMIT ACTION

The test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge. This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body.

(6) WHOLE EFFLUENT TOXICITY CRITERIA (24 - HOUR ACUTE)

(a) SCREENING

The existing permit includes 24-hour acute freshwater biomonitoring language. A summary of the biomonitoring testing for the facility indicates in the past five years, the permittee has performed twenty 24-hour acute tests, with no demonstrations of significant mortality.

(b) PERMIT ACTION

The draft permit includes 24-hour 100% acute biomonitoring tests for the life of the permit.

9. WATER QUALITY VARIANCE REQUESTS

No variance requests have been received.

10. PROCEDURES FOR FINAL DECISION

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice

informs the public about the application, and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application. This notice sets a deadline for public comment.

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment, and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's Response to Comments and Final Decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the Executive Director's Response to Comments and Final Decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application contact Sonia Bhuiya at (512) 239-1205.

11. ADMINISTRATIVE RECORD

The following items were considered in developing the draft permit:

A. PERMIT(S)

TPDES Permit No. WQ0010232002 issued on December 23, 2010.

B. APPLICATION

Application received on March 26, 2014, and additional information received on April 22, 2014.

C. MEMORANDA

Interoffice memoranda from the Water Quality Assessment Section of the TCEQ Water Quality Division. Interoffice memorandum from the Stormwater & Pretreatment Team of the TCEQ Water Quality Division.

D. MISCELLANEOUS

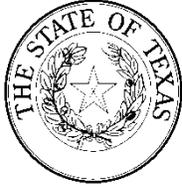
Federal Clean Water Act, § 402; Texas Water Code § 26.027; 30 TAC Chapters 305, 309, 312, 319, 30; Commission policies; and EPA guidelines.

Texas Surface Water Quality Standards, 30 TAC §§ 307.1 - 307.10.

Procedures to Implement the Texas Surface Water Quality Standards (IP), Texas Commission on Environmental Quality, June 2010, as approved by EPA and the IP, January 2003, for portions of the 2010 IP not approved by EPA.

Texas 2012 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, February 21, 2013; approved by the EPA on May 9, 2013.

TNRCC Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits, Document No. 98-001.000-OWR-WQ, May 1998.



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

TPDES PERMIT NO.
WQ0010232002
*[For TCEQ office use only - EPA I.D.
No. TX0070939]*

This amendment supersedes and
replaces TPDES Permit No.
WQ0010232002 issued December 23,
2010.

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

New Braunfels Utilities

whose mailing address is

263 Main Plaza
New Braunfels, Texas 78130

is authorized to treat and discharge wastes from the Gruene Road Water Reclamation Facility,
SIC Code 4952

located approximately 700 feet southwest of the crossing of Gruene Loop Road over the
Guadalupe River, in Comal County, Texas 78131. The relocated domestic wastewater treatment
facility will be located on a 30.1 acre tract on the northeast corner of the intersection of Highway
46 (Loop 337) and Gruene Road, approximately 1.8 miles northwest of Interstate Highway 35 on
Highway 46 in Comal County, Texas 78130.(See Attachment A)

directly to Guadalupe River Below Canyon Dam in Segment No. 1812 of the Guadalupe River
Basin

only according to 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, **February 01, 2020.**

ISSUED DATE:

For the Commission

INTERIM I EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the completion of expansion to the 2.5 million gallons per day (MGD) facility, the permittee is authorized to discharge subject to the following effluent limitations:

The annual average flow of effluent shall not exceed 1.1 MGD; nor shall the average discharge during any two-hour period (2-hour peak) exceed 1,910 gallons per minute (gpm).

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Min. Self-Monitoring Requirements</u>	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Report Daily Avg. & Daily Max.	Measurement Frequency Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (46)	10	20	30	Two/week Composite
Total Suspended Solids	10 (92)	15	25	35	Two/week Composite
Ammonia Nitrogen	3 (28)	6	10	15	Two/week Composite
E. coli, CFU or MPN/100 ml	126	N/A	399	N/A	One/week Grab

- 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.
- The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample.
- There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
- The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored twice per week by grab sample.
- The annual average flow and maximum 2-hour peak flow shall be reported monthly.

INTERIM II EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the completion of expansion to the 2.5 million gallons per day (MGD) facility and lasting through the completion of expansion to the 4.9 MGD facility, the permittee is authorized to discharge subject to the following effluent limitations:

The annual average flow of effluent shall not exceed 2.5 MGD; nor shall the average discharge during any two-hour period (2-hour peak) exceed 6,944 gallons per minute (gpm).

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Min. Self-Monitoring Requirements</u>		
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Report mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency Sample Type
Flow, MGD	Report	N/A	Report	N/A	N/A	Continuous Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (208)	15	25	25	35	Two/week Composite
Total Suspended Solids	15 (313)	25	40	40	60	Two/week Composite
Ammonia Nitrogen	3 (63)	6	10	10	15	Two/week Composite
Total Phosphorus	1.0 (21)	2	4	4	6	Two/week Composite
E. coli, CFU or MPN/100 ml	126	N/A	399	399	N/A	daily Grab

- The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
- The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample.
- There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
- The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored twice per week by grab sample.
- The annual average flow and maximum 2-hour peak flow shall be reported monthly.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the completion of expansion to the 4.9 million gallons per day (MGD) facility 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 4.9 MGD; nor shall the average discharge during two-hour period (2 hour peak flow) exceed 13,611 gallon per minute (gpm).

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Min. Self-Monitoring Requirements</u>		
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (409)	15	25	35	Two/week	Composite
Total Suspended Solids	15 (613)	25	40	60	Two/week	Composite
Ammonia Nitrogen	3 (123)	6	10	15	Two/week	Composite
Total Phosphorus	0.5 (20)	1	2	3	Two/week	Composite
E. coli, CFU or MPN/100 ml	126	N/A	399	N/A	daily	Grab

- The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
- The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample.
- There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
- The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored twice per week by grab sample.
- 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 privilege.

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 169) 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.

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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 13) 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 13) 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

<u>Pollutant</u>	<u>Ceiling Concentration</u> <u>(Milligrams per kilogram)*</u>
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):

<u>Amount of sewage sludge (*) metric tons per 365-day period</u>	<u>Monitoring Frequency</u>
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</u> (pounds per acre)*
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</u> (milligrams per kilogram)*
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 13) 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 13) 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 13) 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 13) 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 B facility must be operated by a chief operator or an operator holding a Category B 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. 1812 of the Guadalupe River Basin and any subsequent updating of the water quality model for Segment No. 1812, 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. Prior to construction of the Interim II and Final phases, the permittee shall submit sufficient evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee according to 30 TAC § 309.13(e)(3). The evidence of legal restrictions shall be submitted to the Executive Director in care of the TCEQ Wastewater Permitting Section (MC 148). The permittee shall comply with the requirements of 30 TAC § 309.13 (a) through (d). (See Attachment B.)
6. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.
7. 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 may be given a less frequent measurement schedule. For this permit, 1/week may be reduced to 2/month in the Interim I phase and Daily may be reduced

to 5/week in the Interim II and Final phase. **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 submit written notice to the TCEQ Wastewater Permitting Section (MC 148).** 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.

8. Prior to construction of the Interim Phase II and Final phase of the treatment facilities, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary submittal letter in accordance with the requirements in 30 TAC Section 217.6(c). If requested by the Domestic Wastewater Permitting Section, the permittee shall submit plans, specifications, and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the permitted effluent limitations required on Page 2a and 2b of this permit.
9. The permittee shall notify the TCEQ Regional Office (MC Region 13) and the Applications Review and Processing Team (MC 148) of the Water Quality Division, in writing at least forty-five (45) days prior to the completion of the new facility on Notification of Completion Form 20007.

CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The permittee shall operate an industrial pretreatment program in accordance with Sections 402(b)(8) and (9) of the Clean Water Act, the General Pretreatment Regulations (40 CFR Part 403), and the approved Publicly Owned Treatment Work (POTW) pretreatment program submitted by the permittee. The pretreatment program was approved on **December 4, 1992**, and modified on **September 30, 1993**, and **August 19, 2011**.

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 30 TAC Chapter 315. The permittee submitted a modification to their pretreatment program containing the required [*i.e.* more stringent] Streamlining Rule provisions to the TCEQ on December 20, 2011. The Executive Director is currently reviewing this modification. If after review of the 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 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 modification submission.

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 the violation of pretreatment standards and requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond federal deadlines.
 - (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)(iii)(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 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.
- 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 40 CFR §§403.5(c)(1) and (2). Such BMPs shall be considered local limits and pretreatment standards.

The permittee is required to effectively enforce such limits and to modify its pretreatment program, including the Legal Authority, Enforcement Response Plan, and Standard Operating Procedures (including forms), 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.

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 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 **December** in a newspaper of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW.

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

- 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. 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.
- e. The information required by this section including the information on the attached tables must be submitted. The permittee may submit the information in tabular form using the example table format provided. Please attach on a separate sheet those explanations to document various pretreatment activities, including IU permits that have expired, BMP violations, and required sampling events not conducted by the permittee as required.
- f. A summary of changes to the POTW's pretreatment program that have not been previously reported to the Approval Authority.
4. 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 September 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' LIST																
Industrial User Name	SIC or NAICS Code	CIU ²	CONTROL MECHANISM				New User ³ (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 ⁶	TBLLs or TBLLs only ⁷				REPORTS				NSCIU Certifications	Effluent Limits	Narrative Standards
										BMR	90-Day	Semi-Annual	Self-Monitoring ⁸			

- 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 §403.8(f)(2)(viii)(H)).
- 5 Code NR= None 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 nonsignificant 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 (TBLLs) 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 TBLLs 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 (TBLLs only), e.g. the IU is a non-categorical SIU subject only to TBLLs 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
Industrial User Inventory Modifications**

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

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

INDUSTRIAL USER INVENTORY MODIFICATIONS					
FACILITY NAME, ADDRESS AND CONTACT PERSON	ADD, CHANGE, DELETE (Including categorical reclassification to NSCIU or MTCIU)	IF DELETION: Reason For Deletion	IF ADDITION OR SIGNIFICANT CHANGE:		
			PROCESS DESCRIPTION	POLLUTANTS (Including any sampling waiver given for each pollutant not present)	FLOW RATE ⁹ (In gpd) R = Regulated U = Unregulated T = Total

9 For NSCIUs, total flow must be given, if regulated flow is not determined.

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			Current Status Returned to Compliance: (Y or N)	Comments
	Effluent Limits	Reports	NSCIU Certifications	Narrative Standards	NOV	A.O.	Civil	Criminal	Other		Y or N	Date Issued	Date Due		

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.

CHRONIC BIOMONITORING REQUIREMENTS: FRESHWATER

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

1. Scope, Frequency, and Methodology

- a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival, reproduction, or growth of the test organisms.
- b. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this part of this 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 its most recent update:
 - 1) Chronic static renewal survival and reproduction test using the water flea (*Ceriodaphnia dubia*) (Method 1002.0). 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 occurs 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). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

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

- c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These effluent dilution concentrations are 2%, 3%, 5%, 6%, and 8% effluent. The critical dilution, defined as 6% 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 WET limit, a chemical-specific effluent limit, a best management practice, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.
- e. Testing Frequency Reduction
 - 1) If none of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee may submit this information in writing and, upon approval, reduce the testing frequency to once per six months for the invertebrate test species and once per year for the vertebrate test

species.

- 2) If one or more of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee shall continue quarterly testing for that species until this permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant toxicity, the permittee shall resume a quarterly testing frequency for that species until this 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 test; and the growth and survival endpoints in the fathead minnow test;
 - 5) a critical dilution CV% of 40 or less for the young of surviving females in the water flea test; and the growth and survival endpoints for the fathead minnow 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; and
 - 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 the Fisher's exact test as described in the manual referenced in in Part 1.b.
 - 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 manual referenced in Part 1.b.
 - 3) The permittee is responsible for reviewing test concentration-response

relationships to ensure that calculated test-results are interpreted and reported correctly. The document entitled "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.

- 4) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the survival in the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 80% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.
- 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 defined as a statistically significant difference between the survival, reproduction, or growth of the test organism in a specified effluent dilution when compared to the survival, reproduction, or growth of the test organism in the control.
- 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.
- 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 guidance manual referenced in Item 3 will be used when making a determination of test acceptability.
- 8) TCEQ staff will review test results for consistency with rules, procedures, and permit requirements.

c. Dilution Water

- 1) Dilution water used in the toxicity tests must be the receiving water collected at a point upstream of the discharge point 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) use 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 Part 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 Part 2.a;
 - b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days); and
 - c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3.
 - 3) The synthetic dilution water shall consist of standard, moderately hard, reconstituted 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 being 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 number 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 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 this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

- a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated whether carried to completion or not.
- b. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with 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 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 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. Significant lethality and significant effect were defined in Part 2.b. Significant sublethality is defined as a statistically significant difference in growth/reproduction at the critical dilution when compared to the growth/reproduction 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.
- b. If the retests are performed due to a demonstration of significant lethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5. The provisions of Part 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 Part 4.a. demonstrates significant lethality, the permittee shall again perform two retests as stipulated in Part 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.

- 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, or within 45 days of being so instructed due to multiple toxic events, the permittee shall submit a general outline for initiating a 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 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, or within 90 days of being so instructed due to multiple toxic events, 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 analyses 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 describe an approach for the reduction or elimination of lethality for both test species defined in Part 1.b. At 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 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 a specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source 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, and 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.
- 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 suspected pollutant performed during the quarter;
 - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
 - 3) any data and substantiating documentation which identifies the pollutant(s) and source of effluent toxicity;
 - 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
 - 5) any data that 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, i.e., there is a cessation of lethality, 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.

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 defined as proactive efforts that 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 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 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 its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall provide information pertaining to the specific control mechanism selected that will, when implemented, result in the reduction of effluent toxicity to no significant lethality at the critical dilution. The report shall also provide a specific corrective action schedule for implementing the selected control mechanism. A copy of the TRE final report shall also be submitted to the U.S. EPA Region 6 office.
- h. Based on the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.

TABLE 1 (SHEET 1 OF 4)

BIOMONITORING REPORTING

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

Dates and Times Composites Collected

No. 1 FROM: _____ Date _____ Time _____ TO: _____ Date _____ Time _____

No. 2 FROM: _____ Date _____ Time _____ TO: _____ Date _____ Time _____

No. 3 FROM: _____ Date _____ Time _____ TO: _____ Date _____ Time _____

Test initiated: _____ am/pm _____ date

Dilution water used: _____ Receiving water _____ Synthetic Dilution water _____

NUMBER OF YOUNG PRODUCED PER ADULT AT END OF TEST

REP	Percent effluent					
	0%	2%	3%	5%	6%	8%
A						
B						
C						
D						
E						
F						
G						
H						
I						
J						
Survival Mean						
Total Mean						
CV%*						
PMSD						

*Coefficient of Variation = standard deviation x 100/mean (calculation based on young of the surviving adults)
 Designate males (M), and dead females (D), along with number of neonates (x) released prior to death.

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 than the number of young per adult in the control for the % effluent corresponding to significant nonlethal effects?

CRITICAL DILUTION (6%): _____ YES _____ NO

PERCENT SURVIVAL

Time of Reading	Percent effluent					
	0%	2%	3%	5%	6%	8%
24h						
48h						
End of Test						

2. Fisher’s Exact Test:

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

CRITICAL DILUTION (6%): _____ 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 replicate chambers					Mean Dry Weight	CV%*
	A	B	C	D	E		
0%							
2%							
3%							
5%							
6%							
8%							
PMSD							

* Coefficient of Variation = standard deviation x 100/mean

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

Is the mean dry weight (growth) at 7 days significantly less than the control's dry weight (growth) for the % effluent corresponding to significant nonlethal effects?

CRITICAL DILUTION (6%): _____ 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	
0%									
2%									
3%									
5%									
6%									
8%									

* 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 than the control survival for the % effluent corresponding to lethality?

CRITICAL DILUTION (6%): _____ 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 (WET) testing.

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 Texas Surface Water Quality Standard 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.
- b. The toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this 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 its most recent update:
 - 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 each dilution.
 - 2) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

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 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 dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.
 - d. This permit may be amended to require a WET limit, a best management practice, a chemical-specific limit, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic 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 Part 1.c., the control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.

c. Samples and Composites

- 1) The permittee shall collect one composite sample from Outfall 001.
- 2) The permittee shall collect the composite sample such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged.
- 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the composite sample. The sample 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.
- 5) The effluent sample shall not be dechlorinated after sample collection.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required in this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

- a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated.
- b. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit.
 - 1) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.
 - 2) Quarterly biomonitoring test results are due on or before April 20th, July 20th, and October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.
- c. Enter the following codes for the appropriate parameters for valid tests only:
 - 1) For the water flea, Parameter TIE3D, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter 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 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, which is defined as a mean mortality of 50% or greater of organisms exposed to the 100% effluent concentration for 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 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.
- b. If one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5.

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 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 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 analyses 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 Part 1.b. At 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 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 and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source 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, and 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.
- 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 suspected pollutant performed during the quarter;
 - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
 - 3) any data and substantiating documentation that identifies the pollutant

and source of effluent toxicity;

- 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
- 5) any data that 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, i.e., there is a cessation of lethality, 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.

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 defined as proactive efforts that 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 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 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 its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall specify the control mechanism that will, when implemented, reduce effluent

toxicity as specified in Part 5.h. The report shall also specify a corrective action schedule for implementing the selected control mechanism. 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 30 TAC § 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 its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE.

The permittee may be exempted from complying with 30 TAC § 307.6(e)(2)(B) upon proving that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g., metals) form a salt compound. Following the exemption, this 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, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.

TABLE 2 (SHEET 1 OF 2)

WATER FLEA SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	6%	13%	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

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

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

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent

Delete this line and insert an electronic copy of the buffer zone map of other attachments

ATTACHMENT B

PROPOSED MAJOR AMENDMENT – TPDES PERMIT NO. WQ0010232002

**APPLICATION BY
NEW BRAUNFELS
UTILITIES FOR
TPDES PERMIT NO.
WQ0010232002**

**§
§
§
§
§**

**BEFORE THE
TEXAS
COMMISSION ON
ENVIRONMENTAL
QUALITY**

EXECUTIVE DIRECTOR’S RESPONSE TO PUBLIC COMMENT

The Executive Director (ED) of the Texas Commission on Environmental Quality (the commission or TCEQ) files this Response to Public Comment (response) on the application by New Braunfels Utilities (Applicant) for a Major Amendment with Renewal to Texas Pollutant Discharge Elimination System (TPDES) Permit, proposed permit No. WQ0010232002, and on the ED’s preliminary decision on the application. As required by Title 30 of the Texas Administrative Code (30 TAC) Section (§) 55.156, before a permit is issued, the ED prepares a response to all timely, relevant and material, or significant comments. The Office of the Chief Clerk received timely comment letters from Brad Bechtol, Dennis Ezell, Harvey and Josephine Heideman, Skylar Koepp, Joy Martinka, Scott Roots, and a concerned citizen identified only as “Dimick.” This response addresses all timely public comments received, whether or not withdrawn. If you need more information about this permit application or the wastewater permitting process, please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can also be found at our website at <http://www.tceq.texas.gov/>.

BACKGROUND

The Applicant applied to the TCEQ for a Major Amendment with Renewal to TPDES Permit, proposed permit no. WQ0010232002. The Major Amendment would authorize the relocation of the Gruene Road Water Reclamation and Wastewater Treatment Facility (Proposed Facility), the relocation of Outfall 001, and an increase in the volume of discharge of treated domestic wastewater from an annual average flow not to exceed 1.1 million gallons per day (MGD) to an annual average flow not to exceed 4.9 MGD. The proposed permit would include an Interim II phase (2.5 MGD) and Final phase (4.9 MGD). Currently the facility is operating in the Interim I phase (1.1 MGD).

Description of Facility

The existing facility is located approximately 700 feet southwest of the crossing of Gruene Loop Road over the Guadalupe River, in Comal County, Texas 78131. The Proposed Facility’s location would be on a 30 acre site located on the northeast corner of the intersection of Highway 46 (Loop 337) and Gruene Road, approximately 1.8 miles northwest of Interstate Highway 35 on Highway 46 in Comal County, Texas 78130.

The proposed facility will be an activated sludge process plant operated in the complete mix mode. Treatment units in all phases include bar screens, an aerated grit chamber,

aeration basins, clarifiers, aerobic sludge digester, sludge thickeners, sludge drying beds, chlorine contact chamber, Ultraviolet Light (UV) system, and dechlorination chamber. The proposed permit authorizes a registered transporter to haul sludge generated at the facility to a TCEQ permitted landfill, Mesquite Creek Landfill, Permit No. MSW-66B, in Comal and Guadalupe County, for disposal. The proposed permit also authorizes the disposal of sludge at a TCEQ authorized land application site or co-disposal landfill.

The discharge of treated domestic wastewater will enter directly into the Guadalupe River Below Canyon Dam in Segment No. 1812 of the Guadalupe River Basin. The designated uses for Segment No. 1812 are exceptional aquatic life use, aquifer protection, public water supply, and primary contact recreation. Segment No. 1812 does not appear on the State's inventory of impaired and threatened waters (the 2012 Clean Water Act Section 303(d) list).

In accordance with 30 TAC § 307.5 of the Texas Surface Water Quality Standards (TSWQS) and the Procedures to Implement the TSWQS, June 2010 (June 2010 IPs),¹ Antidegradation reviews of the receiving waters were performed. The Tier 1 Antidegradation review preliminarily determined that no impairment of existing water quality uses would result from this permitting action, as the TCEQ expects the proposed permit to maintain the numerical and narrative criteria protecting the existing uses. Because the Tier 1 review preliminarily determined that the stream reach assessed contained water bodies with an exceptional aquatic life use, the TCEQ performed a Tier 2 Antidegradation review. The Tier 2 review preliminarily determined that no significant degradation of water quality is expected in the Guadalupe River Below Canyon Dam (Segment No. 1812), because the TCEQ expects the proposed permit to protect and maintain the existing uses. This determination is preliminary and subject to additional review and revisions if the TCEQ receives new information.

Procedural Background

The TCEQ received the application for a new TPDES permit on March 26, 2014, and declared it Administratively Complete on April 22, 2014. The Applicant published the Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) in Comal County, Texas in English on May 11, 2014 in the *New Braunfels Herald-Zeitung*, and in Spanish on May 26, 2014 in *La Voz*. The ED completed the technical review of the application on October 21, 2014, and prepared the proposed permit, which if approved, would establish the conditions under which the facility must operate. The Applicant published the Notice of Application and Preliminary Decision for a Water Quality Permit (NAPD) in Comal County, Texas in English on January 11, 2015 in the *New Braunfels Herald-Zeitung* and in Spanish on January 7, 2015 in *La Prensa De San Antonio*. The public comment period closed on February 10, 2015. Because this application was administratively complete on or after September 1, 1999, it is subject to procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999.

Access to Rules, Laws and Records

All administrative rules: Secretary of State Website: www.sos.state.tx.us

¹ "Procedures to Implement the Texas Surface Water Quality Standards," June 2010.

TCEQ rules: Title 30 of the Texas Administrative Code: www.sos.state.tx.us/tac/ (select TAC Viewer on the right, then Title 30 Environmental Quality)
Texas statutes: <http://www.statutes.legis.state.tx.us/>
TCEQ website: <http://www.tceq.texas.gov/> (for downloadable rules in WordPerfect or Adobe PDF formats, select “Rules,” then “Current TCEQ Rules,” then “Download TCEQ Rules”)
Federal rules: Title 40 of the Code of Federal Regulations (C.F.R.): www.epa.gov/epahome/cfr40.htm
Federal environmental laws: www.epa.gov/epahome/laws.htm
Environmental or Citizen Complaints may be filed online at: <http://www.tceq.state.tx.us/enforcement/complaints/index.html>.
Or by sending an email to the following address: cmplaint@TCEQ.state.tx.us.

Commission records for the proposed facility are available for viewing and copying at TCEQ’s main office in Austin, located at 12100 Park 35 Circle, Building E, Room 103 (Central Records, for existing or past permits), or Building F, 1st Floor (Office of Chief Clerk, for the current application until final action is taken). The permit application, proposed permit, technical summary, and the ED’s preliminary decision have been available for viewing and copying at the New Braunfels Utilities Main Office, located at 263 Main Plaza, Front Desk, New Braunfels, Texas 78130.

The ED has determined that the proposed permit, if issued, meets all statutory and regulatory requirements and is protective of the environment, water quality, and human health. However, if you would like to file a complaint about the facility concerning its compliance with provisions of its permit or with TCEQ rules, you may contact the Agency at 1-888-777-3186 or you may contact the TCEQ Region 13 Office at (210) 767-3500 to address potential permit violations. If an inspection by the Regional office finds that the facility is out of compliance, the facility may be subject to enforcement actions.

COMMENTS and RESPONSES

COMMENT 1

Brad Bechtol, Scott Roots, Skylar Koepf, and Harvey and Josephine Heideman (Commenters) all commented that they live on the Guadalupe River (River) and engage in recreational activities in, on, and adjacent to the River on their properties and enjoy the beauty and aesthetic value of the River and its aquatic life. The Commenters all expressed concern with the proposed facility, and the proposed discharge’s effect on the use and enjoyment of their properties.

Similarly, Dennis Ezell commented that the average wind direction in New Braunfels is from the south 26% of the time, from the southeast 13% of the time, from the north 13% of the time, and from the northeast 11% of the time. Mr. Ezell comments that he and his family are concerned about the effect on air quality from the proposed facility’s location.

Likewise, a concerned citizen identified only as “Dimick,” commented that because the existing facility “stinks,” the Applicant ought to move the Proposed Facility further away, rather than closer.

RESPONSE 1

The TCEQ rules, found at 30 TAC § 101.4, prohibit Applicants from creating or maintaining a condition of nuisance at a site that interferes with a landowner's use and enjoyment of their property.

Similarly, nothing in the proposed permit limits the ability of nearby landowners to use common law remedies for trespass, nuisance, or other causes of action in response to activities that may or do result in injury or adverse effects on human health or welfare, animal life, vegetation, or property. Nor does the proposed permit limit the ability of a nearby landowner to seek relief from a court in response to activities that may or do interfere with the normal use and enjoyment of their property or animal life. If the Applicant's activities create any nuisance conditions, the TCEQ may be contacted to investigate whether a permit violation has occurred. Potential permit violations may be reported to the TCEQ Region 13 Office in San Antonio at (210) 490-3096, or by filing citizen complaints online at the following website:

<http://www.tceq.state.tx.us/enforcement/complaints/index.html>.

If the site currently or in the future causes problems with odor or other issues that need addressing, please contact the TCEQ by calling the 24-hour statewide toll-free Environmental Complaints Hotline at 1-888-777-3186. Concerned citizens may also reach the TCEQ via email about complaints at complaint@tceq.texas.gov. The TCEQ investigates all complaints received.

Additionally, the TCEQ rules require domestic wastewater treatment facilities to meet buffer zone requirements for the abatement and control of nuisances according to 30 TAC § 309.13(e) prior to construction of a new wastewater facility. These rules provide three options for applicants to satisfy the nuisance abatement and control requirement. (1) Wastewater treatment plant units may not be located closer than 150 feet to the nearest property. (2) The applicant must submit a nuisance-odor prevention request for approval by the ED. (3) The Applicant must submit sufficient evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the Applicant. Sufficient evidence of legal restriction may take the form of a suitable restrictive easement, right-of-way, covenant, deed restriction, deed recorded, or a private agreement provided as a certified copy of the original document. The Applicant must submit the request prior to construction, with a permit application to be reviewed and processed during the permitting process, or for ED approval after the permitting process is completed. In other words, an Applicant can meet the buffer zones requirements by ownership of the buffer zone area, or by restrictive easement from the adjacent property owners for any part of the buffer zone not owned by the Applicant.

To comply with 30 TAC § 309.13(e)(3), and as a measure to abate and control nuisance odors, the proposed permit includes Other Requirement No. 5 that requires the Applicant to obtain legal restrictions prohibiting residential structures within the portions of the buffer zone not owned by the Applicant to the north, south and west of the proposed facility.

In addition, the proposed wastewater treatment will be an aerobic biological process. Aerobic biological processes use oxygen from the air to reduce the organic content of the

wastewater through biological action. Oxygen turns sulfide compounds (the most common odor-causing compounds) into odorless sulfates, just as wastewater without DO can produce offensive odors. The proposed permit requires that the effluent contain a minimum of 4.0 mg/L of DO in all three phases of the proposed permit.

Again, if the facility has problems with odor and noise or other issues, contact the TCEQ at 1-888-777-3186 or (210) 490-3096 for the TCEQ Region 13 Office.

With respect to air quality, the Texas Clean Air Act provides that certain facilities are exempt from the requirements of an air quality permit if, upon review, the facility will not release a significant amount of air contaminants to the atmosphere, protecting human health and the environment. These facilities are permitted by rule under the Texas Clean Air Act and TCEQ air rules,² meaning that a separate air permit is not required so long as certain rules are followed and certain conditions apply to the situation. Pursuant to Texas Health and Safety Code, and the Texas Clean Air Act § 382.057, the activities listed in 30 TAC § 106.532 have been reviewed and determined not to make a significant contribution of air contaminants to the atmosphere. The activities and processes of domestic wastewater treatment facilities are permitted by rule,³ and those facilities performing only the wastewater treatment functions listed in 30 TAC § 106.532(1) are exempted and permitted by rule. The proposed facility intends to treat wastewater by Activated Sludge Treatment, which is permitted by rule under 30 TAC § 106.532(1)(L).

COMMENT 2

Brad Bechtol, Scott Roots, Skylar Koepp, and Harvey and Josephine Heideman (Commenters) all expressed concern with the proposed discharge's effect on the use and enjoyment of their properties, and its effect on water quality in the River, and the resulting effect on recreating in the River.

The Commenters alluded to the River currently suffering from algal blooms due to excess nutrients, and that when algae grow excessively, it is unpleasant for swimming, wading, or boating, and sometimes swimming is impossible because of the algae growth. The Commenters expressed the belief that if approved, the proposed permit would make algae growth worse and further harm their recreational use and enjoyment of the River.

Harvey Heideman commented that because of the proposed permit, the entire River would be full of green moss during dry years and unusable for people, and will be unfit for human use from Loop 337 to the Comal River.

RESPONSE 2

When reviewing an application for a domestic wastewater discharge permit, TCEQ staff considers the public health concerns of property owners, as well as those of the public. Likewise, the Commission takes the concerns and comments expressed by property owners and members of the general public relating to water quality and protecting the

² Texas Health & Safety Code § 382.057, and 30 TAC § 106.532.

³ 30 TAC § 106.531.

State's rivers and lakes into consideration in deciding whether to issue a wastewater discharge permit.

The proposed permit includes requirements for the proposed facility to ensure the protection of human health, aquatic life, water quality, and the environment.

The proposed permit also includes definitions and standard permit conditions, monitoring and reporting requirements, operational requirements, and sludge provisions that are all meant to ensure the protection of water quality and human health.

Chapter 26 of the Texas Water Code and the TCEQ water quality rules are geared towards the protection of public health, aquatic life and the environment. Accordingly, the stated policy of both the Texas Water Code and the TCEQ water quality rules is:

“to maintain the quality of water in the state consistent with the public health and enjoyment, the propagation and protection of terrestrial and aquatic life, and the operation of existing industries, taking into consideration the economic development of the state; to encourage and promote the development and use of regional and area-wide waste collection, treatment, and disposal systems to serve the waste disposal needs of the citizens of the state; and to require the use of all reasonable methods to implement this policy.⁴”

Therefore, discharges of treated wastewater into water in the state from facilities regulated under the TPDES program are required to meet the requirements of the Texas Surface Water Quality Standards (TSWQS).

The TSWQS is one of the primary mechanisms for the TCEQ to protect surface water quality, groundwater, human health, aquatic life, the environment, and the designated uses of receiving waters. The TSWQS include specific numeric and narrative water quality criteria applicable to the waters receiving the discharge of treated wastewater. As specified in the TSWQS, permits issued by the TCEQ must maintain water in the state to preclude adverse toxic effects on human health resulting from contact recreation, consumption of aquatic organisms, consumption of drinking water, or any combination of the three. In addition, permits must preclude adverse toxic effects on aquatic life, terrestrial life, livestock, and domestic animals resulting from contact, consumption of aquatic organisms, consumption of water, or any combination of the three. Likewise, waters in the state with a sustainable fishery and which have been designated as public water supply, such as Guadalupe River, must not exceed applicable human health toxic criteria.

The goal of the TCEQ's TPDES permitting program is to design permits that meet the TSWQS. As a result, TCEQ staff review wastewater discharge applications to ensure that effluent limits in permits comply with TCEQ rules.

The proposed permit was developed in accordance with the TSWQS to be protective, provided the Applicant operates and maintains the proposed facility according to TCEQ rules and the proposed permit's requirements. The methodology outlined in the June 2010 IPs is designed to ensure compliance with the TSWQS (30 TAC Chapter 307).

⁴ Texas Water Code § 26.003 and 30 TAC § 307.1.

Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health.

As part of the application process, TCEQ staff must determine the uses of the receiving waters and set effluent limits that are protective of those uses, including aquatic life and contact recreation.

In order to achieve the goal of maintaining a level of water quality sufficient to protect existing water body uses, the proposed permit contains several water quality specific parameter requirements that limit the potential impact of the discharge on the receiving waters.

In accordance with 30 TAC § 307.5 of the TSWQS and the June 2010 IPs, an Antidegradation review of the receiving waters was performed. The Tier 1 Antidegradation review preliminarily determined that no impairment of existing water quality uses would result from this permitting action, as the TCEQ expects the proposed permit to maintain the numerical and narrative criteria protecting the existing uses. Because the Tier 1 review preliminarily determined that the stream reach assessed contained water bodies with an exceptional aquatic life use, the TCEQ performed a Tier 2 Antidegradation review. The Tier 2 review preliminarily determined that no significant degradation of water quality is expected in the Guadalupe River Below Canyon Dam (Segment No. 1812), identified as having exceptional aquatic life use, because the TCEQ expects the proposed permit to protect and maintain the existing uses. If the TCEQ receives new information, it may reexamine and modify the preliminary determination.

TCEQ staff evaluated this application and incorporated pertinent site-specific factors in an effort to reduce uncertainty and bolster confidence in the results of the analysis. This review preliminarily determined that existing water quality standards and uses will be maintained by this permitting action. The existing water quality uses for Guadalupe River include aquifer protection, exceptional aquatic life use, public water supply and contact recreation. Likewise, the effluent limitations in the proposed permit were developed to maintain and protect those existing in-stream uses.

Effluent limitations in the proposed permit for the conventional effluent parameters (i.e., five-day Carbonaceous Biochemical Oxygen Demand (**BOD₅**), Total Suspended Solids (**TSS**), Ammonia Nitrogen (**NH₃-N**), and minimum effluent Dissolved Oxygen (**DO**)) are based on stream standards and waste load allocations for water quality limited streams as established in the TSWQS and the State of Texas Water Quality Management Plan (WQMP). The proposed permit's effluent limits were reviewed for consistency with the State of Texas WQMP. Additionally, the effluent limitations for some of the major constituents have been evaluated using a mathematical model of the receiving waters.

DO modeling analyses are performed in order to evaluate whether the effluent limits in a discharge permit are predicted to be adequate to ensure that DO concentrations in the

water bodies along a discharge route will be maintained above the criteria established by the Standards Implementation Team for those water bodies. DO concentrations in a water body are critical for protection of aquatic life.

In order to evaluate the potential DO impact of the proposed discharge under the most conservative conditions, the ED's staff incorporates what are known as critical conditions into DO modeling analyses. The DO modeling analyses were performed under critical conditions, which are representative of hot and dry summertime conditions with critical low-flow when DO levels would typically be at their lowest, or when discharge conditions are typically the most restrictive for DO.

While the existing effluent limits (5.0 mg/L CBOD₅, 3.0 mg/L NH₃-N and 4.0 mg/L DO), at a flow of 1.1 MGD, were predicted to maintain the DO criterion, a new DO analysis, using the QUAL-TX model, was performed on the discharge at the new proposed outfall location. Based on the model results, at the flow rates proposed by the Applicant (1.1 MGD, 2.5 MGD and 4.9 MGD), the proposed effluent limits for the new outfall location are predicted to maintain the DO criterion of the Guadalupe River Below Canyon Dam (6.0 mg/L DO) in all three flow-phases.

In addition, TCEQ staff performed a site visit to determine the efficacy of the current treatment levels. Because of concerns for potential proliferation of algae in the receiving waters due to the influence of the proposed discharge, TCEQ staff performed screening procedures in accordance with the TSWQS and the June 2010 IPs indicating that the proposed permit required nutrient limits. Based on this information, TCEQ staff recommended a Total Phosphorus limit of 1.0 mg/L for the proposed permit for the Interim II Phase's flow of 2.5 MGD, and a limit of 0.5 mg/L during the Final Phase's flow of 4.9 MGD. Phosphorus is a key nutrient necessary for algae growth and is often in limited supply in freshwater systems. Restricting the amount of phosphorus in the treated wastewater significantly reduces the likelihood of the discharge stimulating excessive growth of algae or other aquatic vegetation.

The model results indicated that limits at the new proposed outfall location in all three flow-phases should be as follows. During the Interim I phase, limits of 5.0 mg/L CBOD₅, 15.0 mg/L TSS, and 3.0 mg/L NH₃-N are required for discharging. During the Interim II phase, limits of 10.0 mg/L CBOD₅, 15.0 mg/L TSS, 3.0 mg/L NH₃-N, and 1.0 mg/L Total Phosphorus (P) are required for a discharging. During the Final phase, limits of 10.0 mg/L CBOD₅, 15.0 mg/L TSS, 3.0 mg/L NH₃-N, and 0.5 mg/L P are required for discharging.

With respect to recreating in the river, the proposed permit includes a disinfection limit of 126 colony-forming units or most probable number of *E. coli* per 100 ml and a pH limit to ensure that the proposed facility meets water quality standards for the protection of surface water quality, groundwater, and human health according to TCEQ rules and policies.

During Interim Phase I, the pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored once per week by grab sample. There discharge must not contain floating solids or visible foam in more than trace amounts and no visible oil. Additionally, the effluent must 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 must be monitored daily by grab sample. The Applicant must dechlorinate the effluent to less than 0.1 mg/L chlorine residual and must monitor chlorine residuals daily by grab sample after the dechlorination process. Substitution of an equivalent method of disinfection requires prior ED approval.

During Interim Phase II and the Final Phase, the pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored once per week by grab sample. There discharge must not contain floating solids or visible foam in more than trace amounts and no visible oil. However, the Applicant must utilize an Ultraviolet Light or UV system for disinfection purposes, and substitution of an equivalent method of disinfection requires prior ED approval.

COMMENT 3

Skylar Koepp, Brad Bechtol, Scott Roots, and Harvey and Josephine Heideman all commented that they are concerned about the Proposed Permit's effect on water quality because the proposed outfall will be located closer to New Braunfels' drinking water intake system.

RESPONSE 3

All of the proposed effluent sets are consistent with 30 TAC § 309.3(c), the "Statewide Lake Rule," which applies to discharges within five (5) miles upstream of a lake or reservoir that may be used as source for public drinking water supply (measured from the normal conservation pool elevation). The Statewide Lake Rule requires minimum effluent limits of 10.0 mg/L BOD₅, 15.0 mg/L TSS, and 4.0 mg/L minimum effluent DO.

COMMENT 4

Skylar Koepp commented about concerns over water quality as it relates to accidental chemical spills.

RESPONSE 4

The only step in the treatment process that uses chemicals is the chlorination process in the disinfection stage. The design of the chlorination system must adhere to the chemical disinfection and safety criteria found in 30 TAC Chapter 217, Subchapter K, which requires ED approval.

In addition, TPDES permits not only include effluent limitations, but operational standards and safeguards intended to minimize the occurrence of operational mishaps. For instance, the proposed facility, which is a Category B facility, must be operated by a chief operator or an operator holding a Category B license or higher. Therefore, a licensed chief operator or an operator holding the required level of license or higher must operate the proposed facility a minimum of five days per week. Likewise, 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.

However, spills are not expected to occur at the proposed facility if it is maintained and operated in accordance with TCEQ rules and the provisions in the proposed permit. Any spills occurring at the facility, would be a violation of Permit Condition 2(g), an unauthorized discharge for which an enforcement action can be brought by the TCEQ against the Applicant. Permit Condition 2(g) prohibits unauthorized discharge of wastewater or any other waste. 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.

With respect to the operation of the proposed facility, as mentioned above, the proposed permit has operational safeguards intended to minimize the occurrence of operational mishaps. General Requirement No. 2(d) requires the Applicant to “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.” Operational Requirement No. 1 requires the Applicant to ensure that the proposed facility and all its systems of collection, treatment, and disposal are properly operated and maintained at all times. Operational Requirement No. 4 makes the Applicant “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.” Operational Requirement No. 8(b) requires “the plans and specifications for domestic sewage collection and treatment works associated with [this facility] 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.” Likewise, the proposed facility must be designed in accordance with 30 TAC Chapter 217 (Design Criteria for Domestic Wastewater Systems). For example, 30 TAC § 217.16 requires that a facility’s operations and maintenance manual must include “emergency operation plans for power outages, flooding, and other site specific emergency situations that may develop.”

COMMENT 5

Brad Bechtol, Scott Roots, Skylar Koepp, Joy Martinka, and Harvey and Josephine Heideman (Commenters) all commented that the proposed permit will violate the Anti-degradation standards of the TSWQS. Because Segment No.1812 was identified as having exceptional aquatic life use; exceptional aquatic life use is water exceeding fishable/swimmable quality; and waters exceeding fishable/swimmable quality are subject to the Tier 2 Anti-degradation standards, the Commenters cite a violation of the TSWQS (30 TAC § 307.5 (c)(2)(D)). The Antidegradation implementation procedures of the TSWQS state that “[w]hen degradation of waters exceeding fishable/swimmable quality is Anticipated, a statement that the Antidegradation policy is pertinent to the permit action must be included in the public notice for the permit application or amendment. If no degradation is Anticipated, the public notice must so state.”⁵ The Commenters take issue with the statement from the NAPD that the Tier 2 Antidegradation review preliminarily determined that no significant degradation of

⁵ 30 TAC § 307.5(c)(2)(D)

water quality is expected in the Guadalupe River Below Canyon Dam. The Commenters point out that the TSWQS do not distinguish “degradation” from “significant degradation.” Because the TSWQS direct that, certain public notice requirements are required whenever the TCEQ anticipates *any* (emphasis added) degradation, and therefore requiring a determination of whether the lowering of water quality “is necessary for important economic or social development,”⁶ the Commenters believe that the Tier 2 Antidegradation Review performed on the proposed permit does not comply with the TSWQS.

RESPONSE 5

According to the TCEQ’s Tier 2 antidegradation policy, activities in waters that exceed fishable/swimmable quality that are subject to regulation cannot cause degradation of water quality unless it can be shown to the Commission’s satisfaction that the lower water quality is necessary for important economic or social development.⁷ This means that if the Tier 2 antidegradation review determines that activities subject to regulation in waters exceeding fishable/swimmable quality will result in degradation of water quality, the TSWQS prohibit those activities unless demonstrated to the satisfaction of the Commission that the degradation is necessary for important economic or social development. The Tier 2 Anti-degradation standard of the TSWQS, detailed in 30 TAC § 307.5(b)(2), specifies that “Degradation is defined as a lowering of water quality by more than a de minimis extent, but not to the extent that an existing use is impaired.”⁸

A full and complete Tier 2 Antidegradation review of the proposed discharge was performed for the Guadalupe River Below Canyon Dam in Segment No. 1812 of the Guadalupe River Basin. The review considered existing uses of this water body and background water quality. While the NAPD stated, “no significant degradation is expected,” the Tier 2 Antidegradation review preliminarily determined that that water quality would not be lowered by more than a de minimis extent, and that existing uses would be maintained and protected. Because the Tier 2 Antidegradation review preliminarily determined that water quality would not be lowered by more than a de minimis extent; degradation is defined as a lowering of water quality by more than a de minimis extent, no degradation of water quality is expected. Because no degradation of water quality is expected, a determination by the Commission of whether the lowering of water quality is necessary for important economic or social development is not necessary for the ED to issue the proposed permit.

Finally, because degradation of waters exceeding fishable/swimmable quality is not anticipated, the NAPD’s statement that no significant degradation is anticipated does not conflict with the TSWQS, detailed in 30 TAC § 307.5 (c)(2)(D).

COMMENT 6

Brad Bechtol, Scott Roots, Skylar Koepp, Joy Martinka, and Harvey and Josephine Heideman all commented that the Applicant has not demonstrated that the substantial increase in the volume of flow authorized by the proposed permit is warranted.

⁶ 30 TAC § 307.5(b)(2).

⁷ Tex. Admin. Code § 307.5 (b)(2) (2013).

⁸ 30 TAC § 307.5 (b)(2).

RESPONSE 6

The evaluation of need is not addressed in either the Texas Water Code or the TCEQ's rules. The application for a domestic wastewater discharge permit requires applicants to justify the flow needed by the facility.

The instructions for completing an application for a municipal wastewater treatment plant (WWTP) state that “[t]he Commission is charged with the responsibility of determining the need for a permit.” The instructions go on to instruct the applicant to provide information regarding the start date, projected size, and projected growth rate of the development.

The legislature authorized the TCEQ to consider need and regional treatment options when issuing, amending, or renewing a permit to discharge waste by enacting Texas Water Code § 26.0282 “Consideration of Need and Regional Treatment Options” which provides:

. . . the commission may deny or alter the terms and conditions of the proposed permit, amendment, or renewal based on consideration of need, including the expected volume and quality of the influent and the availability of existing or proposed areawide or regional waste collection, treatment, and disposal systems not designated as such by commission order pursuant to provisions of this subchapter.⁹

As indicated by the title, this section only applies to need as it relates to regionalization. It does not apply to the “need” for a particular development. Likewise, there is nothing in the application or the instructions that require the Applicant to evaluate the underlying “need” for the development, nor does the Permit Writer evaluate the need for the underlying development.

Applicants for domestic wastewater permits must provide the ED with a variety of information; however, they are not required to provide information regarding the need for the underlying development or an analysis of other treatment or disposal options in the context of wastewater permitting. Such information is extraneous and irrelevant to the ED's approval or disapproval of an application for a TPDES permit.

The permit application was evaluated as an application to authorize the discharge of treated wastewater into water in the State. Accordingly, the quality of the effluent and the method of achieving that quality should be such that they are in accordance with the Federal Clean Water Act, the Texas Health and Safety Code, the Texas Water Code and the TCEQ rules.

The TCEQ's responsibility is to act on TPDES permit applications. In the permit application, the Applicant is required to justify the proposed flows by indicating the projected population to be served by the proposed WWTP.

Publicly Owned Treatment Works (POTWs), such as the Proposed Facility, operate best when the flow is near the design flow. It is common for POTWs to request several phases in their TPDES permits to allow the POTW to be expanded as the city's need increases.

⁹ TEX. WATER CODE ANN § 26.0282 (West 2010).

The ED has determined that there is sufficient need for the Proposed Facility. However, if the Applicant 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 ED, it must promptly submit such facts or information.

In the same way, the proposed permit, if issued, is granted on the basis of the information supplied and representations made by the Applicant 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, the proposed 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. Good cause includes, but is not limited to, obtaining the proposed permit by misrepresentation or failure to disclose fully all relevant facts; or a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

COMMENT 7

Joy Martinka commented that the existing facility is subject to flooding and the location of the Proposed Facility does not appear to be at any higher elevation. Dennis Ezell commented that instead of constructing the Proposed Facility, the TCEQ ought to force the Applicant to elevate and update the existing facility to the Federal Emergency Management Agency's (FEMA) elevation requirements and that of modern building technology.

Skylar Koepp, Brad Bechtol, Scott Roots, and Harvey and Josephine Heideman all commented that the location of the Proposed Facility is unsuitable for a wastewater treatment plant and outfall.

Dennis Ezell, in discussing other options for the location of the Proposed Facility, asked whether wastewater treatment plants (WWTPs) could be built over the Edwards Aquifer.

Ms. Martinka further commented that the location of the Proposed Facility was zoned for commercial or tourist use in 1993. Ms. Martinka questions when and if the zoning designation changed.

RESPONSE 7

The scope of the TCEQ's jurisdiction in a TPDES application is limited to the issues set out by statute. As a result, the TCEQ does not have jurisdiction under the Texas Water Code or its regulations to address or consider flooding in the context of a wastewater discharge permit. The permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes and coastal waters. However, to the extent that an issue related to flooding also involves water quality, the Applicant is required to comply with all the numeric and narrative effluent limitations and other conditions in the proposed permit at all times, including during flooding or erosion conditions. Likewise, the proposed permit includes effluent limits and other requirements that the Applicant must meet even during rainfall events and periods of flooding. According to the application, the proposed facility is located above the 100-year flood plain. For additional protection, the proposed permit

includes Other Requirement No. 6, which requires the Applicant to provide protection for the Proposed Facility from a 100-year flood.

For any additional flooding concerns, Ms. Martinka or Mr. Ezell may wish to contact the Floodplain Administrator in their area. The TCEQ Resource Protection Team can provide assistance in identifying and contacting the local floodplain administrator, by calling (512)239-4691. Additionally, FEMA has programs designed to mitigate damage caused by flooding.

Texas Water Code § 26.027, authorizes the TCEQ to issue permits for discharges into water in the state, however, TCEQ's permitting authority does not include the authority to mandate the manner of treatment and discharge of the effluent. Instead, the TCEQ may only evaluate applications for WWTPs based on the information provided in the application.

The ED evaluates the proposed wastewater treatment technology and the effect(s) of the treated wastewater on the uses of the receiving stream starting at the point of discharge, and must provide the appropriate effluent limitations to protect these uses. The ED can recommend issuance or denial of an application based on whether the application complies with the Texas Water Code and TCEQ regulations, but as mentioned above, the ED does not have the authority to mandate a different discharge route or location.

Concerning the suitability of the location of the proposed facility, one of the stated purposes in the TCEQ rules on Domestic Wastewater Effluent Limitations and Plant Siting (Chapter 309), is selection of a site that minimizes possible contamination of ground and surface waters.¹⁰ 30 TAC § 309.10(b) conditions the "issuance of a permit and/or approval of construction plans and specifications for new domestic wastewater treatment facilities or the substantial change of an existing unit on selection of a site that minimizes possible contamination of ground and surface waters."¹¹

The TCEQ rules regarding unsuitable site characteristics for Domestic WWTPs, specify that "[a WWTP] unit may not be located in the 100-year flood plain unless the plant unit is protected from inundation and damage that may occur during that flood event.¹² A wastewater treatment plant unit may not be located in wetlands, and [a] wastewater treatment plant unit may not be located closer than 500 feet from a public water well nor 250 feet from a private water well."¹³ TCEQ rules protect private and public water wells by requiring that a WWTP unit must be located a minimum horizontal distance of 150 feet from a private water well; or 500 feet from a public water well site, spring, or other similar sources of public drinking water.¹⁴ A wet well or pump station at a wastewater treatment facility must be located a minimum horizontal distance of 300 feet from a public water well site, spring, or other similar sources of public drinking water.¹⁵

¹⁰ 30 TAC § 309.10(b).

¹¹ 30 TAC § 309.10(b).

¹² 30 TAC § 309.13(a).

¹³ 30 TAC §§ 309.13(b) and(c).

¹⁴ 30 TAC §§ 309.13(c)(1) and(2).

¹⁵ 30 TAC § 309.13(c)(4).

The TCEQ rules related to domestic WWTPs also prohibit a WWTP surface impoundment to be located in areas overlying the recharge zones of major or minor aquifers in all but two specific set of circumstances. First, the aquifer must be “separated from the base of the containment structure by a minimum of three feet of material with a hydraulic conductivity toward the aquifer not greater than 10^[sup]-7^[/sup] cm/sec or a thicker interval of more permeable material which provides equivalent or greater retardation of pollutant migration.¹⁶ The second set of circumstances is when a “synthetic membrane liner [is] substituted with a minimum of 30 mils thickness and an underground leak detection system with appropriate sampling points.”¹⁷

Likewise, the Edwards Aquifer rules prohibit new municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading, if the discharges are over the Recharge Zone of the Edwards Aquifer.¹⁸

Additionally, the Edwards Aquifer rules at 30 TAC § 213.6(c) prescribe minimum effluent limits for new or increased municipal wastewater discharges. For discharges located more than five miles but within ten miles upstream from the Edwards Aquifer Recharge Zone, the minimum effluent limits are: 10.0 mg/L CBOD₅, 15.0 mg/L TSS, 3.0 mg/L NH₃-N, and 4.0 mg/L minimum DO (all based on a 30-day average). For wastewater discharges within zero to five miles upstream from the Recharge Zone, the minimum effluent limits are: 5.0 mg/L CBOD₅, 5.0 mg/L TSS, 2.0 mg/L NH₃-N, and 1.0 mg/L phosphorus (Total P) (all based on a 30-day average). According to the Edwards Aquifer mapping information available to TCEQ staff, the existing facility is located at the break between Recharge zone and Transition zone. The Proposed Facility will be located 1.1 miles downstream in the transition zone. Because the location of the proposed outfall is in the Edwards Aquifer Transition zone, there are not any specific effluent limitations. However, the effluent limits in the proposed permit are at least as stringent as those required for a discharge located within zero to five miles upstream from the Recharge Zone.

The effluent limits in the proposed permit are consistent with the effluent limits required for aquifer protection in 30 TAC §307.7 (relating to aquifer protection). As provided in the Texas Groundwater Protection Strategy (February 2003) “for the recharge zone of the Edwards Aquifer, the state has developed water quality protection measures that specify groundwater recharge as a designated use in the state’s surface water quality standards.”

The proposed permit contains requirements intended to be protective of water quality in the surface water streams that will receive the proposed discharge. Should there be any interaction between surface and groundwater, the required quality of the discharge is expected to be protective of groundwater quality.

Concerning any local zoning regulations, the scope of review in the TPDES permitting process does not include a review of the Applicant’s responsibilities related to local

¹⁶ 30 TAC § 309.13(d).

¹⁷ 30 TAC § 309.13(d).

¹⁸ 30 TAC § 213.8(a)(6).

zoning regulations of the City of New Braunfels. The information submitted by the Applicant formed the basis of the proposed permit's review, which focused on compliance with TCEQ rules and regulations. The TCEQ is not the appropriate entity to enforce the authority of the City of New Braunfels.

COMMENT 8

Joy Martinka commented that she takes issue with the timing of the NAPD. Ms. Martinka further commented that obtaining information related to the application was increasingly difficult. Ms. Martinka commented that neither the Applicant's nor the TCEQ's website gave access to the application itself, and the only way to view the application was to by the Applicant's offices during regular business hours and read the very thick document. Ms. Martinka explained this practice is not convenient for anyone and that in this digital age, the entire application can and should be posted online so that those affected can inspect it. Ms. Martinka pointed out that had she actually read the application, she would have more questions.

RESPONSE 8

The timing of the NAPD was not the result of a decision by the Applicant or the ED. The timing, order, and length of time between the public notices in a TPDES permit are dictated by the procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999, as the application was administratively complete on or after September 1, 1999.

TCEQ's notice rules, adopted pursuant to House Bill 801 and found at 30 TAC § 39.405(f)(1), require Applicants to provide the public with notice of new wastewater discharge permits or Major Amendments to wastewater discharge permits. According to the rule cited above, Applicant must publish the NORI in a "newspaper of largest circulation in the county in which the facility is located or proposed to be located ... if the facility is located or proposed to be located in a municipality, the applicant [must] publish notice in any newspaper of general circulation in the municipality." See *generally* 30 TAC §§ 39.405, 39.418, 39.419, and 39.551. According to 30 TAC § 39.551(c)(1), after the Office of the Chief Clerk has mailed the preliminary decision and the NAPD to the Applicant, the Applicant must publish the NAPD "at least once in a newspaper regularly published or circulated within each county where the proposed facility or discharge is located and in each county affected by the discharge." Additionally, the TCEQ's notice rules applicable to major amendments to permits, require mailed notice of the NORI and NAPD to landowners whose properties are adjacent to the facility or along the discharge route within one mile from the point of discharge.¹⁹

In accordance with TCEQ's notice rules, after the TCEQ declared the application Administratively Complete on April 22, 2014, the Applicant published the Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) in Comal County, Texas in English on May 11, 2014 in the *New Braunfels Herald-Zeitung*, and in Spanish on May 26, 2014 in *La Voz*. The ED completed the technical review of the application on

¹⁹30 TAC §§ 39.413, 39.418, 39.419, and 39.551.

October 21, 2014, and prepared the proposed permit, which if approved, would establish the conditions under which the facility must operate. The Applicant published the Notice of Application and Preliminary Decision for a Water Quality Permit (NAPD) in Comal County, Texas in English on January 11, 2015 in the *New Braunfels Herald-Zeitung* and in Spanish on January 7, 2015 in *La Prensa De San Antonio*.

Concerning access to the application, the TCEQ rules, found at 30 TAC § 39.551(c)(6), require applicants to post a copy of the notice of application and preliminary decision. The notice must be posted on or before the first day of published newspaper notice and must remain posted until the TCEQ has taken final action on the application. The notice must be posted at a place convenient and readily accessible to the public in the administrative offices of the political subdivision in the county in which the discharge is located.

COMMENT 9

Skylar Koepp, Brad Bechtol, Scott Roots, Dennis Ezell, and Harvey and Josephine Heideman all commented that the Proposed Facility and the proposed discharge would adversely affect property values.

RESPONSE 9

The Texas Legislature and the TCEQ encourages the participation of all citizens in the environmental permitting process. However, there are certain concerns of citizens that TCEQ cannot address in the review of a wastewater discharge permit, as the scope of the TCEQ's jurisdiction in a TPDES application is limited to the issues set out by statute.

Section 26.027 of the Texas Water Code authorizes the TCEQ to issue permits to control the discharge of wastes or pollutants into state waters and to protect the water quality of the state's rivers, lakes and coastal waters. The water quality permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters. The TCEQ does not have jurisdiction under the Texas Water Code or its regulations to address or consider property values or the marketability of adjacent property in its determination of whether or not to issue a water quality permit.

However, nothing in the proposed permit limits the ability of nearby landowners to use common law remedies for trespass, nuisance, or other causes of action in response to activities that may or do result in injury or adverse effects on human health or welfare, animal life, vegetation, or property. Nor does the proposed permit limit the ability of a nearby landowner to seek relief from a court in response to activities that may or do interfere with the normal use and enjoyment of their property or animal life. If the Applicant's activities create any nuisance conditions, the TCEQ may be contacted to investigate whether a permit violation has occurred. Potential permit violations may be reported to the TCEQ Region 13 Office in San Antonio at (210) 490-3096, or by filing citizen complaints online at the following website:

<http://www.tceq.state.tx.us/enforcement/complaints/index.html>.

COMMENT 10

Brad Bechtol, Scott Roots, Skylar Koepp, Joy Martinka, and Harvey and Josephine Heideman (Commenters) all commented that the proposed effluent limits in the proposed permit are not protective of water quality and do not meet current “best available technology” that can remove substantially more of the primary pollutants in municipal wastewater at an affordable cost.

Further, the Commenters expressed that the effluent limits for Interim Phase II and Final Phase Permit represent an increase in the allowable levels of CBOD₅ and TSS for each time-duration parameter (30-day average, 7-day average, and daily maximum). The Commenters feel that the Applicant should at least be expected to maintain the level of nutrient removal it has been achieving under the current permit. However, due to the increase in effluent limitations overall, in order to protect existing uses and prevent degradation, more stringent limits of 5 mg/L BOD, 5 mg/L TSS, and 2 mg/L total nitrogen, and 0.5 phosphorus are necessary.

The Commenters cite that the flow increase from the current permit to the proposed permit is an increase of 3.8 million gallons per day, and that the increased volume will degrade the Guadalupe River. The Commenters state that the effluent levels permitted do not account for periods of low flow; thus, the wastewater is not diluted with River water. For the last three years, the average water flow has been approximately 126 cubic feet per second. [The seven-day, two-year low flow values from 1980 to 2009 in Segment 1812 is 112 and 96 cubic feet per second]. The harmonic mean flow, which the EPA recommends for implementing human health criteria, is 178 cubic feet per second during the period from 1980 to 2008. At the current level of discharge, during periods of low flow, algal blooms, which are generally caused by excess nutrients in the water, increase in abundance such that one cannot even enter the water. If approved as proposed, the discharge will likely result in reduced dissolved oxygen, causing violations of required minimum dissolved oxygen levels for “high quality aquatic habitat.”

RESPONSE 10

The United States Environmental Protection Agency (EPA) granted Texas delegation of authority to implement the NPDES program. The ED performed Tier 1 and Tier 2 antidegradation reviews as part of the review of the application. The ED determined that with the permit limits in the proposed permit, the proposed discharge would not have more than a de minimis effect on water quality in the receiving stream and would be in accordance with the TCEQ Antidegradation Policy. Likewise, the EPA approved the TSWQS. With regards to the TSWQS, approved by the EPA and applicable to the TPDES program, the TCEQ reviewed the application and assigned appropriate permit limits consistent with the TSWQS IPs (January 2003)²⁰ to ensure the permit is consistent with the TSWQS. The TSWQS Implementation Procedures state, “Permits for discharges into classified segments ... or within three miles of any water body that is perennial ... are designed to protect against acute and chronic toxicity and to protect human health.”²¹

The TSWQS June 2010 IPs set forth the procedures necessary to ensure that the general criteria (including designated uses) for water bodies established in 30 TAC § 307.4 of

²⁰ The EPA approved the majority of the June 2010 Implementation Procedures on July 12, 2013.

²¹ *Procedures to Implement the Texas Surface Water Quality Standards* 51 (RG-194 June 2010).

the TSWQS are met. The TCEQ followed these procedures and established appropriate permit limits to ensure that the general criteria in 30 TAC § 307.4, including designated uses, will be met.

Information presented in the application indicates that the Applicant intends to construct the Proposed Facility with a new outfall located downstream from the existing plant, outfall, thus the proposed discharge was evaluated as such, and existing effluent limits were not a consideration for the new outfall. New permits and permit amendments to increase flow normally include an increased loading of oxygen demanding constituents to the receiving waters and are evaluated with DO modeling to develop effluent limits that are predicted to maintain the criterion. Again, DO modeling analyses are performed in order to evaluate whether the effluent limits in a discharge permit are predicted to be adequate to ensure that DO concentrations in the water bodies along a discharge route will be maintained above the criteria established by the Standards Implementation Team for those water bodies. DO concentrations in a water body are critical for protection of aquatic life. The DO modelling is the mechanism that established what the effluent limits ought to be in order to comply with the TSWQS.

The TCEQ performed dissolved oxygen analyses of the proposed discharge using the QUAL-TX modeling for the proposed effluent flows of 1.1 MGD, 2.5 MGD and 4.9 MGD. A 7Q2 (background) flow of 112 cfs was used in the model for the Guadalupe River downstream from the discharge and above the Comal River confluence. Based on model results the effluent limits proposed by the Applicant for the new outfall location of 10 mg/L CBOD₅, 3 mg/L NH₃-N and 4.0 mg/L DO are predicted to maintain the DO criterion of the Guadalupe River Below Canyon Dam (6.0 mg/L) for all three flow phases.

Concerning Best Available Technology (BAT), maintaining water quality criteria is the basis for DO modeling, not BAT. The effluent limitations in the proposed permit for the conventional effluent parameters (i.e., CBOD₅, TSS, NH₃-N, and DO) are based on stream standards and waste load allocations for water quality limited streams as established in the TSWQS and the State of Texas Water Quality Management Plan (WQMP). Whereas, regulations promulgated in Title 40 of the Code of Federal Regulations require technology-based limitations in wastewater discharge permits based on effluent limitations guidelines (ELGs), where applicable, and/or on best professional judgment (BPJ) in the absence of guidelines. Generally, ELGs apply to industrial wastewater discharges, such as those in the Steam Electric Power Generation Point Source Category, applicable to power plants. In the same way industrial permits have technology based limits based on EPA rules, municipal wastewater treatment plants have to meet secondary treatment requirements per 30 TAC Chapter 309.

The effluent limitations in the proposed permit meet the requirements for secondary treatment and the requirements for disinfection according to 30 TAC Chapter 309, Subchapter A: Effluent Limitations. Additionally, the effluent limitations for maximum and minimum pH are in accordance with 40 CFR § 133.102(c) and 30 TAC § 309.1(b).

The more stringent limits, referenced by the Commenters, of 5 mg/L BOD, 5 mg/L TSS, and 2 mg/L total nitrogen, and 0.5 phosphorus are not warranted based on the DO

modeling, and therefore the ED has no justification for inserting the effluent limits into the proposed permit.

COMMENT 11

Brad Bechtol, Scott Roots, Skylar Koepp, and Harvey and Josephine Heideman (Commenters) all commented that the Applicant's compliance history does not justify issuance of the proposed permit. Specifically, the Commenters cite that the Applicant has violated the terms of earlier- issued permits, prompting three enforcement actions by TCEQ. Specifically, in November 2001 the facility was fined for violating permit limits for Ammonia Nitrogen Daily Average and Daily Maximum. In spring of 2012 the facility was issued a Notice of Enforcement for failure to comply with permitted effluent limits for ammonia nitrogen and chlorine. In addition, the facility is the subject of ongoing enforcement procedures, TCEQ Docket No. 2014-1097-MWD-E.

RESPONSE 11

The compliance history is a compilation of the permittee's environmental performance. The TCEQ Enforcement Division compiles the compliance history in accordance with the requirements of 30 TAC Chapter 60. The compliance history report includes a rating number and a classification of high, satisfactory, or unsatisfactory for both the customer (Applicant) and the site. The site rating is calculated based upon negative and positive components including enforcement orders, notices of violations, audits, etc. The customer rating is determined by averaging the ratings of applicable sites owned and operated by the customer. The calculated rating number determines a classification of high which is from 0.0 to less than 0.1 points, average which is from 0.1 to 45 points, or poor which is greater than 45 points. The TCEQ guidance states that a rating of satisfactory means, "generally complies with environmental regulations."

In the spring on 2012, the existing facility was issued a Notice of Enforcement for failure to comply with permitted effluent limit for ammonia nitrogen and chloride (Docket No. 2012-0771-MWD-E), however, it was closed on October 26, 2012.

The compliance history of the Applicant is "satisfactory" for both the customer rating and the site rating. Because both ratings are "satisfactory" there is no justification for denying the proposed permit solely based on the compliance history.

CHANGES MADE TO THE PERMIT IN RESPONSE TO COMMENT

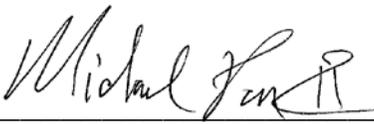
- No changes to the proposed permit were made in response to comment.

Respectfully submitted,

Texas Commission on Environmental
Quality

Richard A. Hyde, P.E.,
Executive Director

Robert Martinez, Environmental Law
Division Director

By 

Michael T. Parr II, Staff Attorney
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Facsimile No. 512-239-0626

Representing the Executive Director of
the Texas Commission on
Environmental Quality

CERTIFICATE OF SERVICE

I certify that on April 17, 2015, the Executive Director's Response to Public Comment for Permit No. WQ0010232002 was filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk.



Michael T. Parr II, *Staff Attorney*
Environmental Law Division
State Bar No. 24062936

ATTACHMENT C

The TCEQ is committed to accessibility.

To request a more accessible version of this report, please contact the TCEQ Help Desk at (512) 239-4357.



Compliance History Report

PENDING Compliance History Report for CN600522957, RN101700946, Rating Year 2014 which includes Compliance History (CH) components from September 1, 2009, through August 31, 2014.

Customer, Respondent, or Owner/Operator:	CN600522957, New Braunfels Utilities	Classification:	SATISFACTORY	Rating:	1.65
Regulated Entity:	RN101700946, GRUENE ROAD PLANT	Classification:	SATISFACTORY	Rating:	5.67
Complexity Points:	7	Repeat Violator:	NO		
CH Group:	08 - Sewage Treatment Facilities				
Location:	ON A 30.1 ACRE TRACT LOCATED ON THE NE CORNER OF THE INTERX OF HWY 46 (LOOP 337) & GRUENE RD APPROX 1.8 MILES NW OF IH 35 ON HWY 46 COMAL, TX, COMAL COUNTY				
TCEQ Region:	REGION 13 - SAN ANTONIO				

ID Number(s):

WASTEWATER PERMIT WQ0010232002

WASTEWATER EPA ID TX0070939

WASTEWATER AUTHORIZATION R10232002

Compliance History Period: September 01, 2009 to August 31, 2014 **Rating Year:** 2014 **Rating Date:** 09/01/2014

Date Compliance History Report Prepared: September 23, 2014

Agency Decision Requiring Compliance History: Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.

Component Period Selected: September 01, 2009 to August 31, 2014

TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.

Name: TCEQ Staff Member

Phone: (512) 239-1000

Site and Owner/Operator History:

- 1) Has the site been in existence and/or operation for the full five year compliance period? YES
- 2) Has there been a (known) change in ownership/operator of the site during the compliance period? NO
- 3) If YES for #2, who is the current owner/operator? N/A
- 4) If YES for #2, who was/were the prior owner(s)/operator(s)? N/A
- 5) If YES, when did the change(s) in owner or operator occur? N/A

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:

- 1 Effective Date: 10/27/2012 ADMINORDER 2012-0771-MWD-E (1660 Order-Agreed Order With Denial)
 - Classification: Moderate
 - Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)
 - Rqmt Prov: Effluent Limit. & Mon. Req. Nos. 1 and 2 PERMIT
Effluent Limits PERMIT
 - Description: Failure to comply with permitted effluent limits.

B. Criminal convictions:

N/A

C. Chronic excessive emissions events:

N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):

Item 1	October 19, 2009	(811965)
Item 2	November 18, 2009	(811966)
Item 3	November 19, 2009	(811968)
Item 4	December 16, 2009	(811967)
Item 5	February 15, 2010	(811962)
Item 6	March 19, 2010	(833387)
Item 7	June 18, 2010	(847054)
Item 8	July 09, 2010	(927670)
Item 9	August 18, 2010	(867834)
Item 10	September 17, 2010	(874788)
Item 11	October 19, 2010	(882376)
Item 12	December 17, 2010	(927669)
Item 13	March 15, 2011	(917210)
Item 14	April 19, 2011	(927667)
Item 15	May 18, 2011	(938904)
Item 16	June 17, 2011	(946281)
Item 17	July 20, 2011	(953551)
Item 18	August 30, 2011	(942755)
Item 19	September 20, 2011	(966232)
Item 20	October 13, 2011	(972251)
Item 21	January 19, 2012	(991496)
Item 22	February 17, 2012	(998843)
Item 23	March 19, 2012	(1004375)
Item 24	April 20, 2012	(1010937)
Item 25	May 15, 2012	(1017308)
Item 26	June 18, 2012	(1025104)
Item 27	July 18, 2012	(1032445)
Item 28	August 16, 2012	(1038871)
Item 29	September 20, 2012	(1047772)
Item 30	October 17, 2012	(1065590)
Item 31	November 14, 2012	(1065591)
Item 32	December 14, 2012	(1065592)
Item 33	January 16, 2013	(1080929)
Item 34	March 15, 2013	(1090231)
Item 35	April 17, 2013	(1096607)
Item 36	May 17, 2013	(1107566)
Item 37	June 17, 2013	(1111211)
Item 38	August 20, 2013	(1125904)
Item 39	September 17, 2013	(1130447)
Item 40	October 17, 2013	(1136223)
Item 41	November 20, 2013	(1141596)
Item 42	December 18, 2013	(1148056)
Item 43	March 18, 2014	(1168093)

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

- 1 Date: 12/31/2013 (1154128) CN600522957
Self Report? YES Classification: Moderate
Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)
Description: Failure to meet the limit for one or more permit parameter

- 2 Date: 01/31/2014 (1192494) CN600522957
Self Report? NO Classification: Minor
Citation: 30 TAC Chapter 315, SubChapter A 315.1
40 CFR Chapter 403, SubChapter N, PT 403 403.8(f)(2)
Description: The Control Authority failed to require the Senior Flexonics Pathway Inc. (Flexonics) facility to submit a complete permit application using the form approved by the CA's Executive Director for the permit issued to the facility that became effective on November 1, 2010.

Pending Compliance History Report for CN600522957, RN101700946, Rating Year 2014 which includes Compliance History (CH) components from September 01, 2009, through August 31, 2014.

Self Report? NO Classification: Minor
 Citation: 30 TAC Chapter 315, SubChapter A 315.1
 40 CFR Chapter 403, SubChapter N, PT 403 403.8(f)
 40 CFR Chapter 403, SubChapter N, PT 403 403.8(f)(1)
 Description: The Control Authority failed to provide the documentation during the audit to determine if the conditions of the interjurisdictional agreement have been implemented and enforced to ensure that the City of Schertz has the proper legal authority, local limits, and identifies Industrial Users that will need to be regulated by the Control Authority's pretreatment program.

Self Report? NO Classification: Minor
 Citation: 30 TAC Chapter 315, SubChapter A 315.1
 40 CFR Chapter 403, SubChapter N, PT 403 403.8(f)(2)(viii)
 Description: The Control Authority failed to evaluate the compliance monitoring analytical results for the Flexonics facility in order to determine the significant noncompliance status of the significant noncompliance criteria on a rolling quarter basis.

- 3 Date: 01/31/2014 (1161451) CN600522957
 Self Report? YES Classification: Moderate
 Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)
 30 TAC Chapter 305, SubChapter F 305.125(1)
 Description: Failure to meet the limit for one or more permit parameter
- 4 Date: 03/31/2014 (1175251) CN600522957
 Self Report? YES Classification: Moderate
 Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)
 30 TAC Chapter 305, SubChapter F 305.125(1)
 Description: Failure to meet the limit for one or more permit parameter
- 5 Date: 04/30/2014 (1181441) CN600522957
 Self Report? YES Classification: Moderate
 Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)
 30 TAC Chapter 305, SubChapter F 305.125(1)
 Description: Failure to meet the limit for one or more permit parameter
- 6 Date: 05/31/2014 (1188340) CN600522957
 Self Report? YES Classification: Moderate
 Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)
 30 TAC Chapter 305, SubChapter F 305.125(1)
 Description: Failure to meet the limit for one or more permit parameter

F. Environmental audits:

N/A

G. Type of environmental management systems (EMSs):

N/A

H. Voluntary on-site compliance assessment dates:

N/A

I. Participation in a voluntary pollution reduction program:

N/A

J. Early compliance:

N/A

Sites Outside of Texas:

N/A

ATTACHMENT D

New Braunfels Utilities WQ0010232002 – Gruene Rd Facility

Map Requested by TCEQ Office of Legal Services
for Commissioners' Agenda



Texas Commission on Environmental Quality
GIS Team (Mail Code 197)
P.O. Box 13087
Austin, Texas 78711-3087
Date: 7/16/2015



Legend

- Requestors
- Discharge Point
- Discharge Route
- River / Stream
- Facility (approx)
- Applicant Property (approx)
- 1-mile Radius from Facility

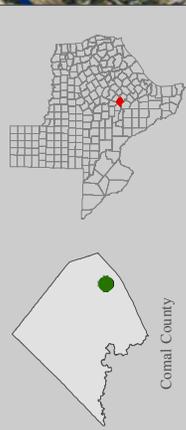
Requestors

1. Bechtol
2. Koepp
3. Roots
4. Heideman



Source: The location of the facility was provided by the TCEQ Office of Legal Services (OLS). OLS obtained the site location information from the applicant and the requestor information from the requestor. The background imagery of this map is from the current Environmental Systems Research Institute (ESRI) map service, as of the date of this map.

This map was generated by the Information Resources Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Information Resource Division at (512) 259-0800.



The facility is located in Comal County. The circle (green) in the left inset map represents the approximate location of the facility. The inset map on the right represents the location of Comal County (red) in the state of Texas.