

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

August 17, 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

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY
2015 AUG 17 PM 2:46
CHIEF CLERKS OFFICE

Re: **Application by Trio Residential Developers, Inc. new TPDES
Permit No. WQ0015219001; TCEQ Docket No.2015-0841-MWD**

Dear Ms. Bohac,

I have enclosed the Executive Director's Response to Hearing Requests in the above-entitled matter. Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Robert Brush".

Robert Brush, *Staff Attorney*
Environmental Law Division
State Bar No. 00788772

cc: Mailing List

Enclosure

TCEQ Docket No.2015-0841-MWD

APPLICATION BY TRIO	§	BEFORE THE TEXAS
RESIDENTIAL DEVELOPERS, INC.	§	COMMISSION ON
FOR TCEQ PERMIT NO.	§	ENVIRONMENTAL QUALITY
WQ0015219001	§	

EXECUTIVE DIRECTOR'S RESPONSE TO HEARING REQUEST AND REQUEST FOR RECONSIDERATION

The Executive Director (ED) of the Texas Commission on Environmental Quality (Commission or TCEQ) files this Response to Hearing Request and Request for Reconsideration on Trio Residential Developers, Inc. (Trio) application for a new Texas Land Application Permit (TLAP), Permit Number WQ0015219001. Hearing requests were filed by Steve Hartpence, Dee Anna and Garry Manitzas, Mary and James McConnell, Cheryl and Harry Schilling, and Frank Trapasso. Requests for Reconsideration were filed by the Department of the Army (Army) and the Greater Edwards Aquifer Alliance (GEAA).

Attached for Commission consideration are the following:

- Attachment A – Satellite map of the area
- Attachment B – Technical Summary and ED's Preliminary Decision
- Attachment C – Draft permit
- Attachment D – ED's Response to Public Comment (RTC)
- Attachment E – Compliance history report

I. FACILITY DESCRIPTION

Trio has applied for a new TLAP permit No. WQ0015219001 to authorize the disposal of treated domestic wastewater at a daily average flow not to exceed 70,000 gallons per day (gpd) in the interim phase and 140,000 gpd in the final phase via surface irrigation of 40.5 acres of public access land. This permit will not authorize a discharge of pollutants into water in the state.

The effluent limitations for the proposed permit, based on a 30-day average, are 10 mg/l biochemical oxygen demand (BOD₅), 15 mg/l total suspended solids (TSS), and the pH not less than 6.0 standard units or greater than 9.0 standard units. 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.

The facility would include one storage pond with a total surface area of 1.5 acres and total storage capacity of 8.6 acre-feet for storage of treated effluent prior to irrigation. Application rates to the irrigated land must not exceed 3.9 acre-feet per year per acre irrigated. The permittee would maintain Old World Bluestem grass (warm season) and Ryegrass (cool season) on the disposal site. The wastewater treatment facility and disposal site would be located in the drainage

basin of the Upper Cibolo Creek in Segment No. 1908 of the San Antonio River Basin. The wastewater treatment facility and disposal site would be located along the north right-of-way of Ammann Road at its intersection with Rolling Acres Trail in Kendall County, Texas.

II. BACKGROUND

The application was received on January 29, 2014, and declared administratively complete on March 14, 2014. The Notice of Receipt of Application and Intent to Obtain Permit (NORI) was published on April 4, 2014 in *The Boerne Star*, in Kendall County, Texas. The Executive Director completed the technical review of the application on June 16, 2014 and prepared a draft permit. The Notice of Application and Preliminary Decision (NAPD) was published on August 1, 2014 in *The Boerne Star* in Kendall County, Texas. A Notice of Public Meeting was published on September 19, 2014 in *The Boerne Star* and the public meeting was held on October 30, 2014 at the Hampton Inn & Suites, 34935 Interstate 10 West, in Boerne, Texas.

It was determined that the place where the application and the draft permit were made available for viewing (the Fairs Oaks Ranch City Hall, 7286 Dietz Elkhorn Road, Fair Oaks Ranch, Texas) during the original NORI/NAPD period was in Bexar County and not Kendall county, where the facility is proposed to be located. Therefore, Trio published a combined NORI/NAPD on December 19, 2014 in *The Boerne Star*. The application and draft permit were then made available for viewing at the Kendall County Courthouse located at 201 E. San Antonio Avenue, Boerne, Texas.

The comment period for this application ended on January 20, 2015. The original RTC was filed on April 24, 2015. An amended RTC was filed on April 30, 2015, prior to mailing by the Office of the Chief Clerk, to correct the list of commenters on page one and fix a typographical error in the procedural background. No changes were made to the comments and responses in the amended RTC. The RTC was mailed on May 1, 2015 and the deadline for requesting a contested case hearing was June 1, 2015. This application is subject to the procedural requirements of House Bill 801, 76th Legislature, 1999.

III. EVALUATION PROCESS FOR HEARING REQUESTS

House Bill (HB) 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. The Commission implemented HB 801 by adopting procedural rules in 30 TAC Chapters 39, 50, and 55.

A. Responses to Requests

“The executive director, the public interest counsel, and the applicant may submit written responses to the [hearing] requests”¹

According to 30 TAC § 55.209(e), responses to hearing requests must specifically address the following:

- 1) whether the requestor is an affected person;
- 2) which issues raised in the hearing request are disputed;
- 3) whether the dispute involves questions of fact or of law;
- 4) whether the issues were raised during the public comment period;
- 5) 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 chief clerk prior to the filing of the ED’s RTC;
- 6) whether the issues are relevant and material to the decision on the application; and
- 7) a maximum expected duration for the contested case hearing.

B. Hearing Request Requirements

For the Commission to consider a hearing request, the Commission must first determine whether the request meets certain requirements. As noted in 30 TAC § 55.201(c), "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 ED’s RTC."

According to 30 TAC § 55.201(d), 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 personal 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;

¹ 30 TEX. ADMIN. CODE section 55.209(d) (West 2012).

- 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 ED'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 application.

C. Requirement that Requestor Be an Affected Person

To grant a contested case hearing, the Commission must determine that a requestor is an affected person. The factors to consider in making this determination are found in 30 TAC § 55.203 and are as follows:

- 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 application.

D. Referral to the State Office of Administrative Hearings

30 TAC § 50.115(b) details how the Commission refers a matter to the State Office of Administrative Hearings (SOAH): "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." Section 50.115(c) further states, "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.”

IV. Evaluation of Requests for Reconsideration

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 March 22, 2013 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 reconsideration filed after September 1, 1999 are found at 30 TAC Chapter 55 Subchapters (d)-(g).

A. Response to Request for Reconsideration

The ED, the public interest counsel, and the applicant may submit written responses to the request for reconsideration.² The response should address the issues raised in the request.³

B. Request for Reconsideration Requirements

Any person may file a request for reconsideration of the ED’s decision. However, for the Commission to consider the request, it must substantially comply with the following: give the name, address, daytime telephone number and, when possible, fax number of the person who files the request; expressly state that the person is requesting reconsideration of the ED’s decision; and give reasons why the decision should be reconsidered.⁴

V. ANALYSIS OF HEARING REQUEST

A. Whether the Requestor Complied with 30 TAC §§ 55.201(c) and (d)

All hearing requestors submitted timely written hearing requests that included relevant contact information and raised disputed issues. The ED concludes that all hearing requests substantially complied with §§ 55.201(c) and (d).

B. Whether the Requestors Meet the Affected Person Requirements

² 30 TAC § 55.209(d).

³ 30 TAC § 55.209(f).

⁴ 30 TAC § 55.201(e).

1. Frank Trapasso and Steve Harpence

Mr. Trapasso states that he is an affected person by virtue of the fact that his primary residence and his private water supply well are approximately four-tenths of a mile south of the boundary of the proposed facility and land application area. He also notes that his water well is just west of many groundwater recharge features that are south of the proposed facility. Mr. Harpence's letter states that the water well that supplies his home is located approximately 5,100 feet southwest of the proposed facility. According to the GIS map prepared by the ED, the properties owned by Mr. Trapasso and Mr. Harpence are 0.33 miles and 0.75 miles, respectfully, southwest of the nearest proposed land application area within the boundary of the facility.⁵ See Attachment A.

Considering the factors under 30 TAC § 55.203, protection of groundwater is an interest regulated by issuance of a state-only land application permit and there is a reasonable relationship between the use and enjoyment of the water wells utilized by Mr. Trapasso and Mr. Harpence and the land application activities and other operations that would be authorized by the permit. The proximity of these water wells to the proposed land application activities, where the precise movement of groundwater is uncertain, weighs in favor of finding that they have a personal justiciable interest not common to the general public in relation to this permit application. The executive director recommends finding Frank Trapasso and Steve Harpence are affected persons in this matter.

2. Mary and James McConnell and Cheryl and Harry Schilling

According to the GIS map prepared by the ED, the properties owned by Mr. and Mrs. McConnell and Mr. and Mrs. Schilling are approximately 1.14 miles and 1.34 miles, respectively, southwest of the nearest proposed land application area within the boundary of the facility. See Attachment A. Both couples have concerns about how the proposed facility might negatively affect the quality of their drinking water from their private water wells and also are concerned with the potential odor impacts from the facility and land application activities.

Protection of groundwater is an interest regulated by issuance of a state-only land application permit and there is a reasonable relationship between the use and enjoyment of these properties and water wells; and the activities authorized by this permit. However, the distance between the nearest land application area, the proposed facility, and the requestor's properties weighs in favor of finding that the McConnell's and Schilling's interests are common to other members of the general public. Both properties are over 1.25 miles away from the nearest land application area, which totals less than 5 acres of the 40.5 acres that would be used for land application activities. The greater the distance from the proposed land application activities, the greater the effects

⁵ To see the proposed land application areas within the facility boundaries, see Attachment C – Draft Permit, Attachment A.

of dilution in the underground water table (as would also be the case in a surface water stream) should treated or untreated effluent reach the water table. Similarly, the effects of odor also are mitigated by dispersal as the distance from odor sources increase. Based on consideration of these factors, the ED is of the opinion that the Mr. and Mrs. McConnell and Mr. and Mrs. Schilling are similarly situated to other members of the general public with respect to this permit application. The executive director recommends finding Mary and James McConnell and Cheryl and Harry Schilling are not affected persons in this matter.

3. Dee Anna and Garry Manitzas

According to the GIS map prepared by the ED, Mr. and Mrs. Manitzas reside approximately 2.5 miles southwest of the nearest proposed land application area within the boundary of the facility (off of the viewable area in the map provided in Attachment A). Mr. and Mrs. Manitzas are concerned about how the quality of their drinking water might be impacted by this facility. According to their letter, Mr. and Mrs. Manitzas obtain their residential water supply from the City of Fair Oaks Ranch.

Considering the applicable factors, protection of groundwater/drinking water is an interest regulated by issuance of a state-only land application permit and there is a reasonable relationship between the use and enjoyment of Mr. and Mrs. Manitzas's property and the activities authorized by this permit. However, a distance of over two miles between the Manitzas' property and the nearest land application area (and further to the facility itself) weigh in favor of finding that the Manitzas's interest is common to other members of the general public. As noted previously, the greater the distance from the proposed land application activities, the greater the effects of dilution in the underground water table should treated effluent reach the water table. Similarly, the effects of odor also are mitigated as the distance from odor sources increase. Based on consideration of these factors, the ED is of the opinion that the Mr. and Mrs. Manitzas are similarly situated to other members of the general public with respect to this permit application. The executive director recommends finding Dee Anna and Garry Manitzas are not affected persons in this matter.

C. Whether Issues Raised Are Referable to SOAH for a Contested Case Hearing

The ED analyzed the issues raised in the hearing requests in accordance with the regulatory criteria and provides the following recommendations regarding which issues should be referred to SOAH. All issues were raised during the public comment period, were not withdrawn, and are considered disputed.

1. Whether operation of the facility and land application activities authorized by the draft permit will contaminate groundwater, including nearby drinking water wells.⁶

This is an issue of fact. If it can be shown that the proposed land application activities would impact water wells in the vicinity, then 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 facility and land application area will cause nuisance odor conditions.

This is an issue of fact. If it can be shown that the proposed operation and land application activities would cause nuisance odor conditions then that information would be relevant and material to a decision on the application. The ED recommends referring this issue to SOAH.

3. Whether the Applicant's actions regarding development of this project to date warrant denial of the permit application.

This is an issue of fact. However, the actions of the Applicant in regards to his interactions with other entities and neighbors to the proposed facility and land application are not germane to consideration of whether to issue this permit. Therefore, the issue is not relevant and material to a decision on the permit application. The ED recommends not referring this issue to SOAH.

4. Whether the facility and associated activities will cause noise issues.

This is an issue of fact. However, noise is not regulated under the laws that govern this permit application. Therefore, the issue is not relevant and material to a decision on the permit application. The ED recommends not referring this issue to SOAH.

5. Whether the proposed development will negatively impact the quantity of groundwater in the area.

This is an issue of fact. However, whether the proposed development will impact the quantity of groundwater in the area is not relevant and material to a decision on the permit application. The ED recommends not referring this issue to SOAH.

VI. ANALYSIS OF REQUESTS FOR RECONSIDERATION

⁶ Note: This issue includes parties being able to address concerns regarding whether there is sufficient documentation of potential recharge features in the proposed location of the facility and land application area.

Timely Requests for Reconsideration (RFRs) were filed by the Greater Edwards Aquifer Alliance (GEAA) and the Department of the Army (Army). Both requests complied with the applicable requirements in 30 TAC § 55.201(f) for requesting an RFR.

A. Greater Edwards Aquifer Alliance

The GEAA RFR focuses on the potential impacts the facility and land application practices may have on groundwater in the area. This concern was raised during the comment period by various commenters and was adequately addressed in the ED's RTC. GEAA did not raise any additional fact issues in their RFR not raised during the comment period. The ED recommends denial of GEAA's RFR.

B. Department of the Army

The Army RFR raises two issues: 1) the potential impact of the facility and land application activities to groundwater in the area, and 2) whether the proposed facility is adequately sized to service the proposed development. Both issues were raised during the comment period and were adequately addressed in the ED's RTC. The Army RFR raises no new additional fact issues. However, in the context of both issues, the Army raises questions of law regarding whether the ED was compliant with 30 TAC §§ 217.10(c), 217.32, and 305.126.

These questions of law do not warrant reconsideration of the ED's decision. However, the ED points out that 30 TAC Chapter 217, which contains the design criteria for wastewater systems, applies when a facility is in the design stage after a permit is issued and a permittee knows what effluent limitations the facility must be designed to meet. Applicants for wastewater permits are not required to meet the requirements of 30 TAC Chapter 217 prior to the permit being issued.

Likewise, 30 TAC § 305.126 is the 75/25 rule cited in the RTC Response #6, which is a requirement that applies after a facility begins operations. If a facility has underestimated the flow necessary to service their customer base when they begin operations, they are subject to the requirement in § 305.126 and are required to seek a permit amendment to increase flow. However, this determination is not made prior to receiving their permit and beginning facility operations. The ED recommends denial of the Army's RFR.

VII. DURATION OF THE CONTESTED CASE HEARING

Should there be a contested case hearing on this application, the ED recommends a hearing duration of nine months from the preliminary hearing to the presentation of a proposal for decision to the Commission.

VIII. CONCLUSION

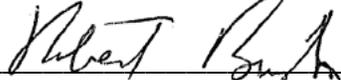
1. Find that Frank Trapasso and Steve Hartpence are affected persons.
2. Deny the hearing requests of Mary and James McConnell, Cheryl and Harry Schilling, and Dee Anna and Garry Manitzas because they are not affected persons.
3. Refer issues #1-2 to SOAH for a hearing of nine months duration from the preliminary hearing date.
4. Deny the RFRs filed by GEAA and the Army.

Respectfully submitted,

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

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

Robert Martinez, Director
Environmental Law Division

By:  _____

Robert Brush
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CERTIFICATE OF SERVICE

I hereby certify that on August 17, 2015 the original and seven true and correct copies of the Executive Director's Response to Hearing Requests relating to the application of Trio Residential Developers, Inc. for TCEQ Permit No. WQ0015219001 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 mail, facsimile transmission, or by deposit in the U.S. Mail.

 _____

Robert D. Brush, Staff Attorney
Environmental Law Division
State Bar No. 00788772

MAILING LIST
TRIO RESIDENTIAL DEVELOPERS, INC.
DOCKET NO. 2015-0841-MWD; PERMIT NO. WQ0015219001

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**FOR ALTERNATIVE DISPUTE
RESOLUTION**

via electronic mail:

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FOR THE CHIEF CLERK:

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FOR THE REQUESTORS:

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US Army Camp Stanley
25800 Ralph Fair Road
Boerne, Texas 78015-4877

Steve Hartpence
31360 Meadow Creek Trail
Fair Oaks Ranch, Texas 78015-4209

Dee Anna and Gary Manitzas
30850 Man O War Drive
Fair Oaks Ranch, Texas 78015-4296

Mary and James McConnell
P.O. Box 1315
Boerne, Texas 78006-1315

Annalisa Peace, Executive Director
Greater Edwards Aquifer Alliance
P.O. Box 15618
San Antonio, Texas 78212-8818

Cheryl and Harry Schilling
31135 Post Oak Trail
Fair Oaks Ranch, Texas 78015-4122

Frank Trapasso
31820 Rolling Acres Trail
Fair Oaks Ranch, Texas 78015-4049

ATTACHMENT A

Trio Residential Developers, Inc.

WQ0015219001

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

Requester to Facility Boundary distances in miles.



Texas Commission on Environmental Quality
GIS Team (Mail Code 197)
P.O. Box 13087
Austin, Texas 78711-3087

Date: 8/11/2015



- Nearest Land
- Application Area
- Requestors
- Facility
- Facility Boundary
- Intermediate Roads
- Minor Roads
- County

ID	REQUESTOR
1	Cheryl and Harry Schilling
2	Dee Anna and Garry Manitzas (beyond viewable map approximately 2.5 mi SW nearest land application area)
3	Mary and James McConnell
4	Steve Hartpence
5	Frank Trapasso

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) 239-0800.



ATTACHMENT B

**TECHNICAL SUMMARY AND
EXECUTIVE DIRECTOR'S PRELIMINARY DECISION**

DESCRIPTION OF APPLICATION

Applicant: Trio Residential Developers, Inc.
TCEQ Permit No. WQ0015219001

Regulated Activity: Domestic Wastewater Permit

Type of Application: New Permit

Request: New Permit

Authority: Texas Water Code (TWC) § 26.027; 30 Texas Administrative Code (TAC) Chapters 305, 309, 312, 319, and 30; and Commission policies.

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 **March 1, 2018**, according to 30 TAC Section 305.127(1)(C)(ii)(III), Conditions to be Determined for Individual Permits.

REASON FOR PROJECT PROPOSED

Trio Residential Developers, Inc. has applied to the Texas Commission on Environmental Quality (TCEQ) for a new permit, Permit No. WQ0015219001 to authorize the disposal of treated domestic wastewater at an Interim phase daily average flow not to exceed 0.07 million gallons per day (MGD) and a Final phase daily average flow not to exceed 0.14 MGD. The surface irrigation will be on 40.5 acres of public access land. The facility will include one storage pond with a total surface area of 1.5 acres and total capacity of 8.6 acre-feet for storage of treated effluent prior to irrigation. The proposed wastewater treatment facility will serve the Reserve at Fair Oaks Ranch.

PROJECT DESCRIPTION AND LOCATION

The Reserve at Fair Oaks Ranch Wastewater Treatment Facility in each phase will consist of an activated sludge process plant using the conventional aeration mode. Treatment units include bar screens, aeration basin, final clarifier, digester and chlorine contact chamber. The facility has not been constructed.

Trio Residential Developers, Inc.

Permit No. WQ0015219001

Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

Sludge generated from the treatment facility will be hauled by a registered transporter to San Antonio Water System, Dos Rios Wastewater Treatment Facility, Permit No. WQ0010137033 to be digested, dewatered and then disposed of with the bulk of the sludge from the plant accepting the sludge. The draft permit also authorizes the disposal of sludge at a TCEQ authorized land application site or co-disposal landfill.

The wastewater treatment facility and disposal site will be located along the north right-of-way of Ammann Road at its intersection with Rolling Acres Trail in Kendall County, Texas 78006.

The wastewater treatment facility and disposal site will be located in the drainage basin of the Upper Cibolo Creek in Segment No. 1908 of the San Antonio River Basin. No discharge of pollutants into water in the State is authorized by this permit.

SUMMARY OF EFFLUENT DATA

There is no effluent data since the facility has not been constructed.

DRAFT PERMIT CONDITIONS

The draft permit authorizes the disposal of treated domestic wastewater effluent at an Interim phase daily average flow not to exceed 0.07 million gallons per day (MGD) and a Final phase daily average flow not to exceed 0.14 MGD. The surface irrigation will be on 40.5 acres of public access land. The facility will include one storage pond with a total surface area of 1.5 acres and total capacity of 8.6 acre-feet for storage of treated effluent prior to irrigation. Application rates to the irrigated land shall not exceed 3.9 acre-feet per year per acre irrigated. The permittee will maintain Old World Bluestem grass (warm season) and Ryegrass (cool season) on the disposal site.

The effluent limitations in the draft permit, based on a daily average, are 10 mg/l BOD₅ and 15 mg/l TSS.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

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.

The permittee shall comply with the requirements of 30 TAC Section 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 Section 309.13(e).

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 will be hauled by a registered transporter to San Antonio Water System, Dos Rios Wastewater Treatment Facility, Permit No. WQ0010137033 to be digested, dewatered and then disposed of with the bulk of the sludge from the plant accepting the sludge. The draft permit also authorizes the disposal of sludge at a TCEQ authorized land application site or co-disposal landfill.

SUMMARY OF CHANGES FROM APPLICATION

none

BASIS FOR DRAFT PERMIT

The following items were considered in developing the permit draft:

1. Application submitted with letter dated January 29, 2014 and additional information submitted with letter dated March 7, 2014.
2. Interoffice Memorandum from the Water Quality Assessment Team, Water Quality Assessment & Standards Section, Water Quality Division.

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.

Trio Residential Developers, Inc.

Permit No. WQ0015219001

Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

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 Phillip Urbany at (512) 239-4542.

Phillip Urbany
Municipal Permits Team
Wastewater Permitting Section (MC 148)

Date

ATTACHMENT C



PERMIT NO. WQ0015219001

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

PERMIT TO DISCHARGE WASTES
under provisions of Chapter 26
of the Texas Water Code

Trio Residential Developers, Inc.

whose mailing address is

12345 Alameda Trace Circle, Apt 522
Austin, Texas 78272

Nature of Business Producing Waste: Domestic wastewater treatment operation, SIC Code 4952.

General Description and Location of Waste Disposal System:

Description: The Reserve at Fair Oaks Ranch Wastewater Treatment Facility in each phase will consist of an activated sludge process plant using the conventional aeration mode. Treatment units in each phase will include bar screens, aeration basin, final clarifier, digester and chlorine contact chamber. The permittee is authorized to dispose of treated domestic wastewater effluent at an Interim phase daily average flow not to exceed 0.07 million gallons per day (MGD) and a Final phase daily average flow not to exceed 0.14 MGD. The surface irrigation will be on 40.5 acres of public access land. The facility will include one storage pond with a total surface area of 1.5 acres and total capacity of 8.6 acre-feet for storage of treated effluent prior to irrigation. Application rates to the irrigated land shall not exceed 3.9 acre-feet per year per acre irrigated. The permittee will maintain Old World Bluestem grass (warm season) and Ryegrass (cool season) on the disposal site.

Location: The wastewater treatment facility and disposal site will be located along the north right-of-way of Ammann Road at its intersection with Rolling Acres Trail, in Kendall County, Texas 78006. (See Attachment A)

Drainage Area: The wastewater treatment facility and disposal site will be located in the drainage basin of Upper Cibolo Creek in Segment No. 1908 of the San Antonio River Basin. No discharge of pollutants into water in the State is authorized by this permit.

This permit and the authorization contained herein shall expire at midnight on **March 1, 2018**.

ISSUED DATE:

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Conditions of the Permit: No discharge of pollutants into water in the State is authorized.

A. Effluent Limitations

Character: Treated Domestic Sewage Effluent

Volume: Daily Average Flow – Interim phase 0.07 MGD from the treatment system
 – Final phase 0.14 MGD from the treatment system

Quality: The following effluent limitations shall be required:

<u>Parameter</u>	<u>Effluent Concentrations</u> (Not to Exceed)			
	<u>Daily Average</u> mg/l	<u>7-Day Average</u> mg/l	<u>Daily Maximum</u> mg/	<u>Single Grab</u> mg/l
Biochemical Oxygen Demand (5-day)	10	15	25	35
Total Suspended Solids	15	25	40	60

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

The effluent shall be chlorinated in a chlorine contact chamber to a residual of 1.0 mg/l with a minimum detention time of 20 minutes. If the effluent is to be transferred to a holding pond or tank, re-chlorination prior to the effluent being delivered into the irrigation system will be required. A trace chlorine residual shall be maintained in the effluent at the point of irrigation application.

B. Monitoring Requirements:

<u>Parameter</u>	<u>Monitoring Frequency</u>	<u>Sample Type</u>
Flow	Continous	Totalizing meter
Biochemical Oxygen Demand (5-day)	One/week	Grab
Total Suspended Solids	One/week	Grab
pH	One/month	Grab
Chlorine Residual	Five/week	Grab

The monitoring shall be done after the final treatment unit and prior to storage of the treated effluent. If the effluent is land applied directly from the treatment system, monitoring shall be done after the final treatment unit and prior to land application. These records shall be maintained on a monthly basis and be available at the plant site for inspection by authorized representatives of the Commission for at least three years.

STANDARD PERMIT CONDITIONS

This permit is granted in accordance with the Texas Water Code and the rules and other Orders of the Commission and the laws of the State of Texas.

DEFINITIONS

All definitions in Section 26.001 of the Texas Water Code 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. ~~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.
- b. 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 1 million gallons per day or greater permitted flow.
- c. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.

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.

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 which 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 REQUIREMENTS

1. Monitoring Requirements

Monitoring results shall be collected 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 in accordance with 30 TAC §§ 319.4 - 319.12.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Texas Water Code, Chapters 26, 27, and 28, and Texas Health and Safety Code, Chapter 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, records 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 Chapter 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, monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, and records of all data used to complete the application for this permit 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, or application. 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 determining compliance with permit requirements.

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 which exceeds any effluent limitation in the 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.

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).

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 which 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 Texas Water Code Section 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 Special Provisions section of this permit.
 - h. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§ 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).
3. Inspections and Entry
- a. Inspection and entry shall be allowed as prescribed in the Texas Water Code Chapters 26, 27, and 28, and Texas Health and Safety Code Chapter 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 Texas Water Code Section 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 could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;
 - ii. 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 Texas Water Code § 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.

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 which requires a permit or other authorization pursuant to the Texas Health and Safety Code.~~

7. Property Rights

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

8. 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.

9. 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.

10. 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;
 - ii. the permit number(s);
 - iii. the bankruptcy court in which the petition for bankruptcy was filed; and
 - iv. 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 Texas Water Code § 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 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 which 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 percent 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 percent 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 percent 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 judgement 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. Facilities which 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 Permitting and Remediation Support 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 Chapter 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.

11. For industrial facilities to which the requirements of 30 TAC Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with Chapter 361 of the Texas Health and Safety Code.

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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 by 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 Chapter 312 and all other applicable state and federal regulations in a manner which protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants which 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 once during the term of this permit 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, which receives the prior approval of the TCEQ for the contaminants listed in Table 1 of 40 CFR Section 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) 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, Permitting and Remediation Support 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 exceed 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> (Milligrams per kilogram)*
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

* Dry weight basis

3. Pathogen Control

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

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

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC Section 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 degrees 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 percent.

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 Section 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 Section 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 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 Section 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 percent.

- 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 degrees Celsius. Volatile solids must be reduced by less than 17 percent 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 degrees Celsius. Volatile solids must be reduced by less than 15 percent to demonstrate compliance.
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- 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 degrees 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 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees 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 percent 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 percent 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 - once during the term of this permit
- PCBs - once during the term of this permit

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>
o 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 Section 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 Section 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 sludges, if applicable).
 3. A description of how the vector attraction reduction requirements are met.
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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 Section 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC Section 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 Section 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 Section 312.47(a)(4)(A)(ii) or 30 TAC Section 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. which 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 Section 312.47(a)(4)(A)(ii) or 30 TAC Section 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 Chapter 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 Chapter 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 once during the term of this permit 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 Section 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, Permitting and Remediation Support 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 Chapter 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.

SPECIAL PROVISIONS:

1. This permit is granted subject to the policy of the Commission to encourage the development of areawide waste collection, treatment and disposal systems. The Commission reserves the right to amend this permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an areawide 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 areawide 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.

2. 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 D facility must be operated by a chief operator or an operator holding a Category D 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.

3. The permittee shall maintain and operate the treatment facility in order to achieve optimum efficiency of treatment capability. This shall include required monitoring of effluent flow and quality as well as appropriate grounds and building maintenance.
4. Prior to construction of the wastewater treatment facilities of the 0.07 MGD Interim phase and 0.14 MGD Final phase, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) of the Water Quality Division, a summary submittal letter according to the requirements in 30 TAC Section 217.6(c). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications and a final engineering design report that comply with the requirements of 30 TAC Chapter 217, Design Criteria for Wastewater Treatment Systems. The permittee shall clearly show how the treatment system will meet the final permitted effluent limitations required on Page 2 of the permit.

5. Reporting requirements according to 30 TAC Sections 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until plant startup or discharge, whichever occurs first, from the facility described by this permit. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 13) and the Applications Review and Processing Team (MC 148) of the Water Quality Division at least forty-five (45) days prior to plant startup or anticipated discharge, whichever occurs first and prior to completion of each additional phase on Notification of Completion Form 20007.
6. The permittee shall comply with the requirements of 30 TAC Section 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 Section 309.13(e).
7. The permittee shall comply with buffer zone requirements of 30 TAC Section §309.13(c). A wastewater treatment plant unit, defined by 30 TAC Section §309.11(9), must be located a minimum horizontal distance of 250 feet from a private well and a minimum horizontal distance of 500 feet from a public water well site, spring, or other similar sources of public drinking water, as provided by §290.41(c)(1)(C) of this title. A land application field must be located a minimum horizontal distance of 150 feet from a private well and a minimum horizontal distance of 500 feet from a public water well site, spring, or other similar sources of public drinking water.
8. No irrigation shall take place within a minimum of 100 feet of any surface water feature.
9. Facilities for the retention of treated or untreated wastewater shall be adequately lined to control seepage in accordance with 30 TAC §217.203 (c) and (d) and 30 TAC § 309.13 (d). The permittee shall furnish certification signed and sealed by a Texas Licensed Professional Engineer that the completed pond lining meets the appropriate criteria above prior to use of the facilities. The ponds must be lined according to one of the following requirements.
 - a) Soil Liner: The soil liner shall contain clay-rich soil material (at least 30% of the liner material passing through a #200 mesh sieve, liquid limit greater than or equal to 30, and plasticity index greater than or equal to 15) along the sides and bottom of the pond. The liner material shall be compacted in lifts of no more than 8 inches to 95% standard proctor density at the optimum moisture content in accordance with ASTM D 698 to achieve permeability equal to or less than 1×10^{-7} cm/sec. The liner shall be a minimum thickness of 2.0 feet for water depths less than or equal to 8.0 feet and a minimum thickness of 3.0 feet for water depths greater than 8.0 feet.

- b) Synthetic/Plastic/Rubber Liner: The liner must be either a plastic or rubber membrane liner at least 40 mils in thickness which completely covers the sides and the bottom of the ponds, and which are not subject to degradation due to reaction with wastewater with which it will come into contact. If the liner material is vulnerable to ozone or ultraviolet deterioration, it shall be covered with a protective layer of soil of at least six inches. An under drain with a leachate detection and collection system is also required.
- c) Alternate Liner: The permittee shall submit plans for any other pond lining method. Pond liner plans must be approved in writing by the Executive Director of the TCEQ prior to pond construction.
-
10. Upon completion of construction, the liner certification signed and sealed by a Texas-licensed professional engineer must be submitted to the TCEQ Water Quality Compliance Monitoring Team (MC-224), Region 13 Office (San Antonio), the Wastewater Permitting Section (MC-148), and the Water Quality Assessment Team (MC-150). The permittee shall notify the TCEQ Region 13 Office (San Antonio) upon completion of construction of any pond and at least a week prior to its use.
11. At least two feet of freeboard shall be maintained in all wastewater ponds.
12. At least once per month, the permittee shall inspect the pond sides and bottom (if visible) for signs of erosion and leakage, and any pond leak detection systems that are in service. Leaking ponds shall be removed from service until repairs are made or replacement ponds are constructed.
13. The liner shall be recertified by a Texas Licensed Professional Engineer ensuring that the liner for each pond meets the requirements noted in Special Provision No. 9 each time the liner undergoes repair or each time sediments are cleaned from the pond. Within 180 days of completion of repair or cleaning, liner certifications should be provided to the TCEQ Water Quality Assessment Team (MC-150) and to the Region 13 Office. A copy of the liner certification shall be kept on-site for future reference.
14. All abandoned and unused wells shall be properly plugged per 16 TAC §76.1004. A copy of the State of Texas Well Plugging report for each well plugged shall be submitted to the TCEQ Water Quality Assessment Team (MC-150) within 30 days of plugging.
15. Permanent transmission lines shall be installed from the holding pond to each tract of land to be irrigated utilizing effluent from that pond.

16. The permittee will maintain of Bermudagrass (warm season) and Ryegrass (cool season) on the disposal site. Application rates to the irrigated land shall not exceed 3.9 acre-feet per year per acre irrigated. The permittee is responsible for providing equipment to determine application rates and maintaining accurate records of the volume of effluent applied. These records shall be made available for review by the Texas Commission on Environmental Quality and shall be maintained for at least three years.
17. Irrigation practices shall be designed and managed so as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance conditions in the area. ~~Grasses or other ground cover shall be established and well~~ maintained in the irrigation area throughout the year for effluent and nutrient uptake by the crop and to prevent pathways for effluent surfacing. Tailwater control facilities shall be provided as necessary to prevent the discharge of any effluent from the irrigated land.
18. Effluent shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.
19. The permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply for any area where treated effluent is stored or where there exist hose bibs or faucets. Signs shall consist of a red slash superimposed over the international symbol for drinking water accompanied by the message "DO NOT DRINK THE WATER" in both English and Spanish. All piping transporting the effluent shall be clearly marked with these same signs.
20. Spray fixtures for the irrigation system shall be of such design that they cannot be operated by unauthorized personnel.
21. Irrigation with effluent shall be accomplished only when the area specified is not in use.
22. The permittee shall maintain a long term contract with the owner(s) of the land application site that is authorized for use in this permit, or own the land authorized for land application of treated effluent.
23. The permittee shall obtain representative soil samples from the root zones of the land application area receiving wastewater. Composite sampling techniques shall be used. Each composite sample shall represent no more than 40.5 acres with no less than 10 subsamples representing each composite sample. Subsamples shall be composited by like sampling depth, type of crop and soil type for analysis and reporting. Soil types are soils that have like topsoil or plow layer textures. These soils shall be sampled individually from 0 to 6 inches, 6 to 18 inches, and 18 to 30 inches below ground level. The permittee shall sample and analyze soils in December to February of each year. Soil samples shall be analyzed within 30 days of procurement.

Parameter	Method	Minimum Analytical Level (MAL)	Reporting units
pH	2:1 (v/v) water to soil mixture		Reported to 0.1 pH units after calibration of pH meter
Electrical Conductivity	Obtained from the SAR water saturated paste extract	0.01	dS/m (same as mmho/cm)
Nitrate-nitrogen, ammonium-nitrogen	From a 1 N KCl soil extract	1	mg/kg (dry weight basis)
Total Kjeldahl Nitrogen (TKN)	For determination of Organic plus Ammonium Nitrogen. Procedures that use Mercury (Hg) are not acceptable.	20	mg/kg (dry weight basis)
Total Nitrogen	= TKN plus Nitrate-nitrogen		mg/kg (dry weight basis)
Plant-available: Phosphorus	Mehlich III with inductively coupled plasma	1	mg/kg (dry weight basis)
Plant-available: Potassium (K) Calcium (Ca) Magnesium (Mg) Sodium (Na)	May be determined in the same Mehlich III extract with inductively coupled plasma	5 (K) 10 (Ca) 5 (Mg) 10 (Na)	mg/kg (dry weight basis)
Water-soluble: Sodium (Na) Calcium (Ca) Magnesium (Mg)	Obtained from the SAR water saturated paste extract	1 (Na) 1 (Ca) 1 (Mg)	Water soluble constituents are reported in mg/L
Sodium Adsorption Ratio (SAR)	$SAR = \frac{Na}{\sqrt{\frac{(Ca + Mg)}{2}}}$		Express concentrations of Na, Ca and Mg in the water saturated paste extract in

			<p>milliequivalents/liter (meq/L) to calculate the SAR. The SAR value is unit less.</p> <p>If the SAR is greater than 10, amendments (e.g., gypsum) shall be added to the soil to adjust the SAR to less than 10.</p>
Amendment addition, e.g., gypsum	Recommendation from analytical laboratory		Report in short tons/acre in the year effected

A copy of this soil testing plan shall be provided to the analytical laboratory prior to sample analysis. The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports and a map depicting the areas that have received wastewater within the permanent land application fields to the TCEQ Regional Office (MC Region 13), the Water Quality Assessment Team (MC 150), and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, no later than the end of September of each sampling year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land irrigation site(s) during that year.

24. The permittee shall use cultural practices to promote and maintain the health and propagation of the Bermudagrass (warm season) and ryegrass (cool season) crops and avoid plant lodging and provide year-round vegetative growth for effluent and nutrient uptake by the crops and to prevent pathways for effluent surfacing. The permittee shall harvest the crops (cut and remove it from the field) at least once per year. Harvesting and mowing dates shall be recorded in a log book kept on site to be made available to TCEQ personnel upon request.
25. The permittee shall analyze annually the irrigation effluent for pH, electrical conductivity, total Kjeldahl nitrogen (TKN), nitrate-nitrogen and total nitrogen. Total nitrogen (TN) equals TKN plus nitrate-nitrogen. Effluent pH shall be measured in standard units (s.u.), conductivity in deciSiemens/meter (same as mmho/cm), TKN and nitrate-nitrogen in milligrams/liter (mg/L). The annual effluent sample analyses with copies of the laboratory reports and a map depicting the areas that have received irrigation effluent within the permanent land application fields shall be submitted with the soil analysis report to the TCEQ Regional Office (MC Region 13), the Water Quality Assessment Team (MC 150), and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, no later than the end of September of each sampling year.

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25. The permittee shall analyze annually the irrigation effluent for pH, electrical conductivity, total Kjeldahl nitrogen (TKN), nitrate-nitrogen and total nitrogen. Total nitrogen (TN) equals TKN plus nitrate-nitrogen. Effluent pH shall be measured in standard units (s.u.), conductivity in deciSiemens/meter (same as mmho/cm), TKN and nitrate-nitrogen in milligrams/liter (mg/L). The annual effluent sample analyses with copies of the laboratory reports and a map depicting the areas that have received irrigation effluent within the permanent land application fields shall be submitted with the soil analysis report to the TCEQ Regional Office (MC Region 13), the Water Quality Assessment Team (MC 150), and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, no later than the end of September of each sampling year.

If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land irrigation site(s) during that year.

26. The irrigation volume (gallons/acre/year) shall not exceed that calculated from the following expression:

$$\text{Volume (gallons/acre/year)} = 39,666,862.48 * (\text{Acreage Irrigated}) / (\text{TN mg/L})$$

Where, Acreage Irrigated is in acres and TN is total nitrogen that equals total Kjeldahl nitrogen plus nitrate-nitrogen. The total volume used for irrigation purposes, the area irrigated and the TN shall be submitted with the soil analysis report to the TCEQ Regional Office (MC Region 13), the Water Quality Assessment Team (MC 150), and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, no later than the end of September of each sampling year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land irrigation site(s) during that year

27. The physical condition of the spray irrigation fields will be monitored on a weekly basis. Any areas with problems such as surface runoff, surficial erosion, stressed or damaged vegetation, etc., will be recorded in the field log kept onsite and corrective measures will be initiated within 24 hours of discovery.
28. The permittee shall submit soil analysis results and site-specific descriptions of the soil in the land application sites within 90 days of permit issuance. Site preparation and installation of the irrigation equipment shall not be effected until the soil analysis results and the site specific soil descriptions are reviewed for adequacy. This information shall be submitted to the Water Quality Assessment Team (MC 150) for review/revision and approval. A copy of this information shall also be submitted to the Municipal Permitting Team (MC 148), the TCEQ Regional Office (MC Region 13), and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division.

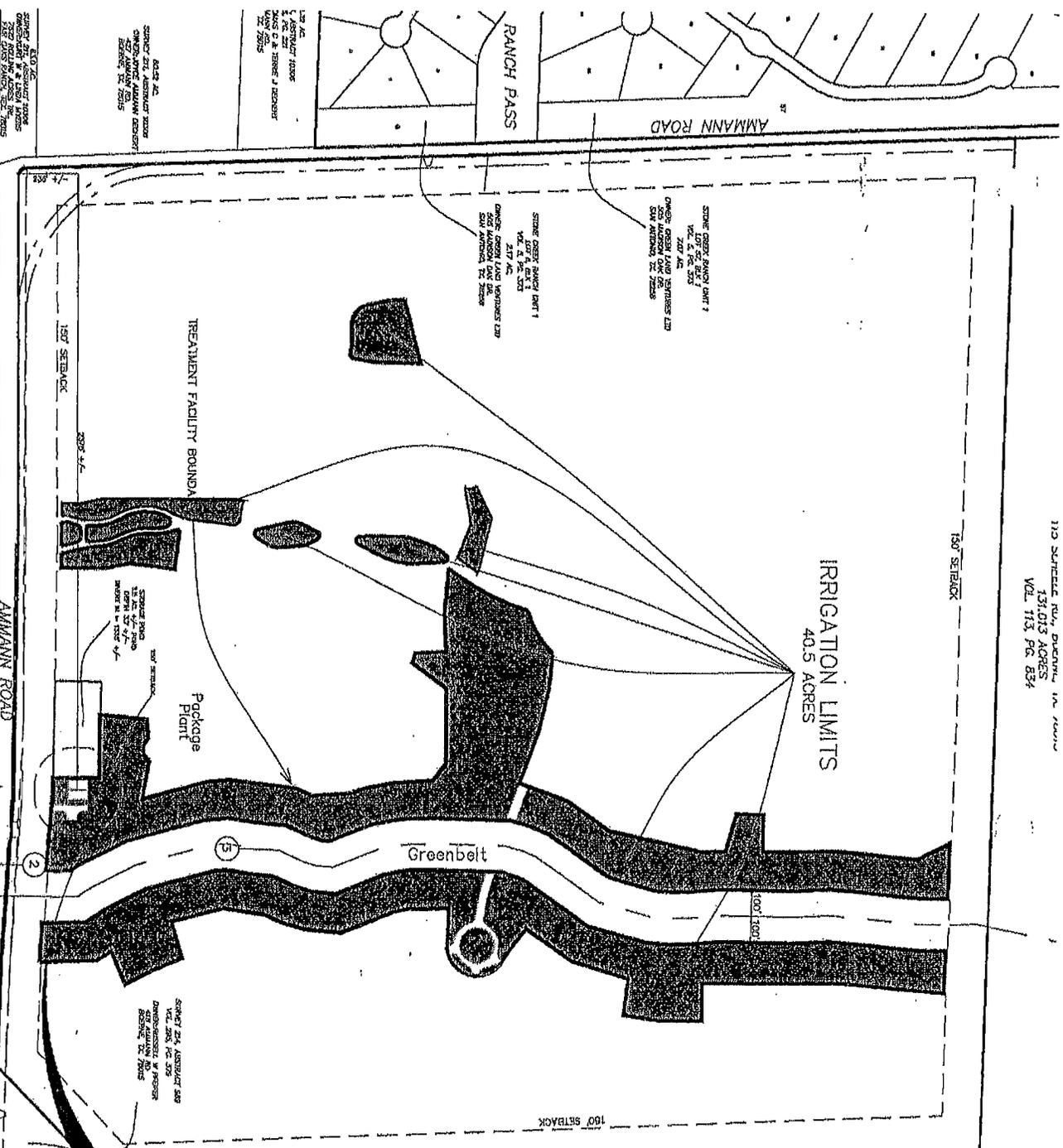
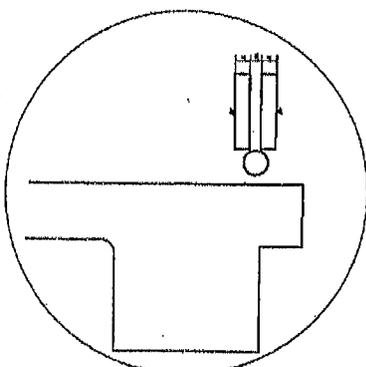
110 SUTELLE RD., DUNCAN, W. VIRGINIA
 131,013 ACRES
 VOL. 113, PG. 834

PROJECT BOUNDARY

IRRIGATION LIMITS
 40.5 ACRES

OWNER: PG PFEIFFER RANCHES LLC
 324 HWY 3351 S, BOERNE, TX. 78008
 140,452 ACRES
 VOL. 113, PG. 838

341,733 ACRES
 VOL. 1195, PG. 423



Trio Residential Developers, Inc.
 TCEQ Permit No. WQ0015219001
 ATTACHMENT "A"

LEGEND
 1 PHOTO ORIENTATION

KENDALL CO.
 COMAL CO.

1780 DAVIS BLVD. PART 1
 VOL. 1, PG. 70
 150 ACRES
 OWNER: RICHMOND COUNTY
 1780 DAVIS BLVD. PART 2
 VOL. 1, PG. 70
 150 ACRES
 OWNER: RICHMOND COUNTY
 1780 DAVIS BLVD. PART 3
 VOL. 1, PG. 70
 150 ACRES
 OWNER: RICHMOND COUNTY

1780 DAVIS BLVD. PART 1
 VOL. 1, PG. 70
 150 ACRES
 OWNER: RICHMOND COUNTY
 1780 DAVIS BLVD. PART 2
 VOL. 1, PG. 70
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 OWNER: RICHMOND COUNTY
 1780 DAVIS BLVD. PART 3
 VOL. 1, PG. 70
 150 ACRES
 OWNER: RICHMOND COUNTY

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 VOL. 1, PG. 70
 150 ACRES
 OWNER: RICHMOND COUNTY
 1780 DAVIS BLVD. PART 3
 VOL. 1, PG. 70
 150 ACRES
 OWNER: RICHMOND COUNTY

ATTACHMENT D

TCEQ INTRA-AGENCY TRANSMITTAL MEMO

DATE: April 30, 2015

TO: FINAL DOCUMENTS TEAM LEADER
OFFICE OF THE CHIEF CLERK
BUILDING F, MC-105

FROM: BOB BRUSH
ENVIRONMENTAL LAW DIVISION
BUILDING A, MC-173

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY
2015 APR 30 PM 2:11
CHIEF CLERKS OFFICE

Attached: Amended Executive Director's Response to Comments

Application Information - Program Area: Water; Permit No. WQ0015219001; Name: Trio Residential Developers, Inc.; Docket/CID Item # (if known): _____

OCC Action Required (*check applicable boxes*)

Date stamp and return copy to above-noted ELD Staff Attorney and:

FOR ALL PROGRAM AREAS: (*required only when changes needed to official agency mailing list*)

Update the mailing list in your file with the attached contact names and addresses
Include corrected or additional names and addresses for mailing list

FOR WASTE & WATER:

Send Response to Comments Letter that solicits hearing requests and requests for reconsideration to the mailing list in your files
For Waste and Water this would occur in all circumstances when comments have been received for 801 applications

Or
Send Response to Comments Letter and Motion to Overturn Letter which solicits motions to overturn to the mailing list in your files
For Waste and Water this may occur when all comments have been withdrawn for 801 applications or when comments are received for applications that will not be set for agenda.

Set for commission agenda and send RTC with agenda setting letter
This would occur when there are pending contested case hearing requests on a no-increase renewal and technical review is complete.

Hold until a commission agenda date is requested and then send RTC with the Agenda Setting Letter
For Air applications this would occur when there are pending hearing requests on a no-increase renewal; but technical review is NOT complete.
If this box is checked, ED staff must call the OCC Agenda Team Leader to arrange a specific agenda date.

Place RTC in File - no further action required by OCC

Other Instructions:

TCEQ PERMIT NO. WQ0015219001

**APPLICATION BY
TRIO RESIDENTIAL
DEVELOPERS, INC.
FOR TPDES PERMIT
NO. WQ0015219001**

§
§
§
§
§

**BEFORE THE
TEXAS COMMISSION
ON
ENVIRONMENTAL QUALITY**

2015 APR 30 PM 2:38
CHIEF CLERK OFFICE

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

AMENDED

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comment (Response) on the application by Trio Residential Developers, Inc. (Trio or Applicant), for a new Texas Land Application Permit (TLAP), Permit Number WQ0015219001 and on the Executive Director's preliminary decision. As required by Title 30 Texas Administrative Code (30 TAC) Section (§) 55.156, before an application is approved, the Executive Director prepares a response to all timely, relevant and material, or significant comments. The Office of the Chief Clerk received timely comment letters from the following entities/groups: Department of the Army, Cow Creek Groundwater Conservation District, and Greater Edwards Aquifer Alliance. Comments were also received from the following individuals: Zane Crockett, Janet Flieller, Ana Forster, Vicky and David Frescas, Bobbie French, Paul Gonzales, Jimmy Alan Hall, Steve Hartpence, Thomas Hodge, Gerald Horst, Tanya James, Thomas Jaster, Kim Keller, Laurette Klar, Theresa Klar and Harry Klar, Carolyn Knopf, Kris Knopf, Dee Anna and Garry Manitzas, Elliott B. McConnell, Mary and James McConnell, Karol McDowell, Holly Moffett, Richard Nichols, Katherine Pope, Helena Ryan, William Ryan, Joseph Scallan, Cheryl Schilling, Kirstin Shine, Susan Shipp, Polly Sparks, Janet and William Stanton, Donna Taylor, Terry Thompson, Patricia and Frank Trapasso, Bob Webster, Raymond Wilson, Terry Wilson, and Andra Wisian.

This response addresses all such 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 be found at our website at www.tceq.state.gov.

I. Background

A. Description of Facility

Trio has applied for a new TLAP permit No. WQ0015219001 to authorize the disposal of treated domestic wastewater at a daily average flow not to exceed 140,000 gallons per day (gpd) via surface irrigation of 40.5 acres of public access land. This permit will not authorize a discharge of pollutants into water in the state.

The effluent limitations for the proposed permit, based on a 30-day average, are 10 mg/l biochemical oxygen demand (BOD₅), 15 mg/l total suspended solids (TSS), and the pH shall not be less than 6.0 standard units or greater than 9.0 standard units. 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.

The draft permit authorizes the disposal of treated domestic wastewater effluent at an interim phase daily average flow not to exceed 70,000 gpd and a final phase daily average flow not to exceed 140,000 gpd. The facility will include one storage pond with a total surface area of 1.5 acres and total storage capacity of 8.6 acre-feet for storage of treated effluent prior to irrigation. Application rates to the irrigated land shall not exceed 3.9 acre-feet per year per acre irrigated. The permittee will maintain Old World Bluestem grass (warm season) and Ryegrass (cool season) on the disposal site.

The wastewater treatment facility and disposal site will be located in the drainage basin of the Upper Cibolo Creek in Segment No. 1908 of the San Antonio River Basin.

The wastewater treatment facility and disposal site will be located along the north right-of-way of Ammann Road at its intersection with Rolling Acres Trail in Kendall County, Texas.

B. Procedural Background

The application was received on January 29, 2014, and declared administratively complete on March 14, 2014. The Notice of Receipt of Application and Intent to Obtain

Permit (NORI) was published on April 4, 2014 in *The Boerne Star*, in Kendall County, Texas. The Executive Director completed the technical review of the application on June 16, 2014 and prepared a draft permit. The Notice of Application and Preliminary Decision (NAPD) was published on August 1, 2014 in *The Boerne Star* in Kendall County, Texas. A Notice of Public Meeting was published on September 19, 2014 in *The Boerne Star* and the public meeting was held on October 30, 2014 at the Hampton Inn & Suites, 34935 Interstate 10 West in Boerne, Texas.

It was determined that the place where the application and the draft permit were made available for viewing (the Fairs Oaks Ranch City Hall, 7286 Dietz Elkhorn Road, Fair Oaks Ranch, Texas) during the original NORI/NAPD period was in Bexar county and not Kendall county, where the facility is proposed to be located. Therefore, Trio published a combined NORI/NAPD on December 19, 2014 in *The Boerne Star*. The application and draft permit were made available for viewing at the Kendall County Courthouse located at 201 E. San Antonio Avenue, Boerne, Texas.

The comment period for this application ended on January 20, 2015. The original Response was filed on April 24, 2015 and this amended response was filed to correct the list of commenters on page one and fix a typo in the procedural background. No changes were made to the comments and responses in the amended Response. This application is subject to the procedural requirements of House Bill 801, 76th Legislature, 1999.

C. Access to Rules, Laws, and Records

Please consult the following websites to access the rules and regulations applicable to this permit:

- to access the Secretary of State website: www.sos.state.tx.us;
- for TCEQ rules in Title 30 of the Texas Administrative Code: www.sos.state.tx.us/tac/ (select “TAC Viewer” on the right, then “Title 30 Environmental Quality”);
- for Texas statutes: www.statutes.legis.state.tx.us;
- to access the TCEQ website: www.tceq.texas.gov/ (for downloadable rules in Adobe PDF format, select “Rules” then “Download TCEQ Rules”);

- for Federal rules in Title 40 of the Code of Federal Regulations: www.gpoaccess.gov/cfr/index.html; and
- for Federal environmental laws: www.epa.gov/epahome/laws.htm.

II. Comments and Responses

Comment 1:

There was a comment that the permit should be approved as proposed, noting that it is a superior alternative to on-site septic systems.

Response 1:

The ED acknowledges the comment in support of the proposed facility.

Comment 2:

There were questions asking how the Applicant will comply with the flow requirements in the draft permit and how often and by what process will the Applicant calibrate its flow measuring devices/equipment.

Response 2:

The draft permit requires the Applicant to measure flow on a continuous basis utilizing a totalizing meter. Monitoring Requirement #5 defines the calibration of instruments at the proposed wastewater treatment facility. Requirement #5 requires that 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 measuring flow accurately. Copies of the verification must be retained at the facility site and be readily available for review by TCEQ representatives.

Comment 3:

There is concern that surface water will be contaminated from runoff from the land application areas or from discharges from the facility during heavy rainfall events, including whether the size of the proposed storage pond is adequate during these heavy

rain events. Additionally, there were questions regarding what controls will be in place to prevent irrigated effluent from impacting surface water.

Response 3:

Effluent irrigation can only occur on established vegetation of Bermuda grass and ryegrass at rates not to exceed 3.87 feet/year equivalent to 0.108 inches/day. This daily rate, when applied uniformly according to the provisions of the draft permit (Special Provisions (SP) 8, 14, 16, 17, 18, 20, 26, and 27), should not cause surface runoff. SP 8 prohibits irrigation within 100 feet of any surface water feature. SP 14 requires plugging (plugged per 16 TAC § 76.1004) of all abandoned and unused water wells. SP 16 requires that the Applicant will maintain vegetation on the disposal site (Bermuda grass during the warm season and Ryegrass during the cool season). It further prohibits exceeding the permitted application rate and makes the permittee responsible for providing equipment to determine application rates and maintaining accurate records of the volume of effluent that is land applied.

SP 17 requires the Applicant to design and manage irrigation practices to prevent ponding of effluent or contamination of ground and surface waters; and to prevent the occurrence of nuisance conditions. Additionally, grasses or other ground cover must be established and well maintained in the irrigation area throughout the year for effluent and nutrient uptake by the crop. Tailwater control facilities must also be provided, as necessary, to prevent the discharge of any effluent from the irrigated land.

SP 18 prohibits effluent irrigation during rainfall events or when the ground is frozen or saturated. SP 20 requires the spray fixtures for the irrigation system to be designed in a manner such they cannot be operated by unauthorized personnel. SP 26 provides a total irrigation volume that cannot be exceeded.

SP 27 requires the Applicant to monitor the physical condition of the spray irrigation fields on a weekly basis. Any areas with problems such as surface runoff, surficial erosion, stressed or damaged vegetation, etc., must be recorded in the field log kept onsite and corrective measures initiated within 24 hours of discovery.

Comment 4:

There is concern that groundwater will be impacted by the operation of this facility and concerns that it could impact the quality of the drinking water of area residents, including contaminating drinking water through high nutrient levels. There were also questions regarding what controls would be in place to prevent irrigated effluent from impacting groundwater and questions asking what studies have been done to assess the effect of irrigated effluent on groundwater in the area. Commenters note that the proposed facility was approximately 400 to 600 feet from the Edwards Aquifer Contribution Zone political boundary (which may actually extend under the proposed facility and development) and that numerous karst features exist in the area of the proposed facility and land application area. It was requested that the Applicant be required to have a survey conducted for cave or recharge features at the proposed site and the results reported to TCEQ. Finally, there were concerns that the soil on the land application area is too thin to support this activity and that the surface area would be more accurately described as karst surface and intermittent creek bed with potential for aquifer recharge.

Response 4:

This draft permit is for a surface irrigation system, and consequently allows no discharge to waters in the state. The draft permit includes provisions to protect surface and groundwater through the use of buffers from creeks and wells, requirements to maintain crop coverage and health, no application of wastewater when the ground is saturated, and weekly inspections of the irrigation fields.

Special Provision No. 6 and 7 requires a minimum horizontal distance of 500 feet from public water wells, springs, or other similar sources of public drinking water, and 250 feet from private water wells as described in 30 TAC § 309.13(c). Additionally, the land where surface irrigation using wastewater effluent occurs must be located a minimum horizontal distance of 150 feet from a private water well as described in 30 TAC § 309.13(c)(1).

Groundwater recharge takes place largely through direct infiltration of rainfall and through stream flow. Special Provision No. 8 requires that no irrigation shall take place within a minimum of 100 feet of any surface water feature including the tributary

to Cibolo Creek to protect groundwater. The irrigation effluent can be retained in the top 5 inches of soil when uniformly distributed in the application site. The soil in the proposed application area has an average depth of 14 inches. There is sufficiency of soil depth to keep irrigation effluent from moving below the rooting depth of the Bermuda grass and ryegrass vegetation on the proposed application site.

The requirements of the draft permit are set to minimize the potential for percolation of effluent beyond the rooting depth so that effluent is completely utilized by the cover crops and does not reach groundwater.

Comment 5:

There were comments that the effluent land application area is mainly in the creek bed of Cibolo Tributary #30, not in pasture land as described in the application. Additionally, it was asked whether the plant or disposal area is located in a flood plain.

Response 5:

The ED notes that because this is a new TPDES permit, the facility will be required to meet the current facility design requirements in 30 TAC Chapter 217. Those rules do not prohibit placement in a flood plain, but do not allow the ED to approve the design of a proposed treatment unit within a 100-year flood plain, unless the design provides protection for all open process tanks and electric units from inundation during a 100-year flood event. *See* 30 TAC § 217.35(c). Additionally, 30 TAC § 309.13(a) states that a “wastewater treatment plant 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.”

Comment 6:

There were comments that the proposed package plant may be undersized based on the size of the development and expected outflow volume. One commenter noted that 30 TAC § 217.32 required that for a facility of this size, the permitted flow is the maximum 30-day average flow estimated by multiplying the average annual flow by a factor of at least 1.5. Using that factor, the permitted 30-day average flow should be 210,000 gallons per day. The commenter also notes that the actual water usage for the rest of Fair Oaks Ranch averaged 556 gallons per household in 2012 and 513 in 2013.

This is about double what is proposed by the application of three persons per household multiplied by 75 gallons for each person (225 gallons total per household).

Response 6:

Item 1 on Page 1 of 44 in the application requires an applicant to provide the design flow rate for the proposed treatment facilities planned for construction within the next five years. TCEQ's review determines if the information provided shows that the initial permitted design flow rates being requested are for units that will be constructed within the next five years. If construction of specific phases will not be started within this five-year time period, the phase may not be included in the proposed permit.

Also, Items 1a and 1 b. on Page 10 of 44 of the application requires an applicant to provide justification for the proposed flows. The response in the application contained a discussion regarding the need for the proposed permit and a justification for the flows requested. Staff reviewed this information to determine if there was sufficient justification to demonstrate the need for the requested flow. Failure to provide sufficient justification for the need for the permit and/or each proposed phase may result in a recommendation for denial of the application or proposed phases.

In regards to the concerns that the facility will be undersized for the estimated households it will serve, Operational Requirement #8.a. of the draft permit outlines the requirements of the 75/90 rule, which addresses this concern. The 75/90 rule requires that whenever flow measurements for a wastewater treatment plant reach 75% of the permitted average daily flow or annual average flow for three consecutive months, a permittee must initiate engineering and financial planning for expansion or upgrading their facility. Whenever the average daily flow or annual average flow reaches 90% of the permitted average daily flow for three consecutive months, a permittee must obtain the necessary authorization from TCEQ to commence construction of the necessary additional treatment and/or collection system. *See* 30 TAC §305.126(a). However, the application does not question whether an applicant has requested a lessor flow than will be required during the next five years.

Other Requirement No. 4 of the draft permit requires that prior to construction of the treatment facilities, the permittee shall submit to the TCEQ a summary submittal letter in accordance with the requirements in 30 TAC § 217.6(c). If requested by the Wastewater Permitting Section, the permittee must submit plans, specifications, and a final engineering design report that comply with 30 TAC Chapter 217, Design Criteria for Wastewater Treatment Systems. The final engineering report would need to show how the permittee will comply with 30 TAC § 217.32, Design Organic Loading and Flows, which specify flow assumption ranges per type of source e.g. residential, school, hospital, etc.

Comment 7:

There were questions regarding what measures will be in place to protect the environment from effluent application, the release/land application of effluent that does not meet treatment standards, and chlorine releases.

Response 7:

Applicant's proposed effluent application rate of 3.87 feet/year or 0.108 inches/day, when evenly distributed over a vegetated area with Bermuda grass and ryegrass over an area with 2.3 percent slopes, will be temporarily stored for plant use in less than 5 inches of soil. This application rate (0.108 inches/day) should not cause surface runoff and thus will be protective of surface and groundwater.

Comment 8:

There were questions regarding how sludge, solids, and chlorine be handled by the facility.

Response 8:

Sludge generated from the treatment facility is planned to be hauled by a registered transporter to San Antonio Water System, Dos Rios Wastewater Facility, permit no. WQ0010137033 to be digested, dewatered, and then disposed of with the bulk of the sludge from the plant accepting the sludge. The draft permit also authorizes the disposal of sludge at a TCEQ authorized land application site or co-disposal landfill. The permittee must handle and dispose of sewage sludge in accordance with 30 TAC Chapter 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.

The Applicant must construct the facility to meet 30 TAC § 217.278 which describes the requirements for the housing Chlorine (Cl₂) for disinfection. The rules states that the permittees must provide gas detectors and protection. An area containing Cl₂ or SO₂ under pressure must have a gas detector and alarm system.

Comment 9:

There were questions regarding what level of treatment would be provided to treat emerging contaminants of concern, such as pharmaceuticals and personal care products. Additionally, it was asked what procedures and protocols will be in place to prevent hazardous, industrial, or other waste from entering the collection system.

Response 9:

The U.S. Environmental Protection Agency (EPA) is investigating pharmaceutical and personal care products (PPCPs), and has, to date, stated that scientists have not found evidence of adverse human health effects from PPCPs in the environment. Examples of pharmaceuticals are antibiotics and analgesics; and examples of personal care products are cosmetics and fragrances. PPCP removal during municipal wastewater treatment, including processes, has been documented in the scientific studies/literature (for example, Lee, Howe and Thompson, 2009; Oulton, Kohn and Cuiertny, 2012; EPA-820-R-10-002, 2010). However, standard removal efficiencies have not been established for PPCPs nor are there state or federal effluent limits.

Additionally, Permit Condition #6 of the draft permit prohibits any hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

Comment 10:

There were questions regarding the type of treatment system proposed and whether the chosen method is proven and suitable for long-term planning. Additionally, there was a comment TCEQ should require ultra-violet disinfection rather than sodium hypochlorite disinfection at this plant.

Response 10:

TCEQ does not mandate how or what treatment technology or processes will be used to meet the effluent limitations ultimately required if the draft permit is issued. However, the draft permit requires that prior to construction of the treatment facilities and after the permit is issued, the Applicant must submit to TCEQ plans and specifications for the facility in accordance with the requirements in 30 TAC § 217.6. Submitting the plans and specifications to TCEQ are not required prior to the permit being issued. However, when submitted, the plans and specifications must clearly show how the treatment system will meet the permitted effluent limitations in the permit.

TCEQ rules require that disinfection of domestic wastewater must be protective of both public health and aquatic life. However, the rules do not require use of specific methods of disinfection.

Comment 11:

There was a question asking what level of nutrients would be in the effluent.

Response 11:

Special Provision #25 in the draft permit requires the operator on an annual basis to analyze the irrigation effluent for total nitrogen content and submit results of annual sampling to TCEQ. Further, the volume of irrigation used in a year is limited by the acreage irrigated and the content of total nitrogen in the irrigation effluent such that the nitrogen requirements of the Bermuda grass crop and the ryegrass crop will not be exceeded.

Comment 12:

There was a question asking whether the effluent limitations in the draft permit were protective of public health, drinking water, wildlife, and plants.

Response 12:

Where irrigation occurs and public contact is possible, the treated effluent must meet the disinfection requirements in 30 TAC Chapter 309. As a result, the existing permit requires a high quality effluent, buffer zones, and disinfection of the treated effluent. The effluent is chlorinated in a chlorine contact chamber to a residual of 1.0 mg/l with a minimum detention time of 20 minutes based on peak flow. The effluent

transferred to the holding pond must be re-chlorination prior to the effluent being delivered into the irrigation system. Trace chlorine residual shall be maintained in the effluent at the point of irrigation application. EPA "Guidelines for Water Reuse" (EPA/625/R-92/004) states that there have not been bacteria related outbreaks resulting from the spray irrigation of treated effluent that was disinfected. The effluent quality should be such so that it can have uses comparable to Type I reclaimed water uses, which are uses that there is likely to be contact with humans. *See* 30 TAC § 210.3(31).

Type I reclaimed water uses include irrigation in areas where the public may be present when irrigation is taking place. Type I reclaim water uses include landscape irrigation at individual homes, public parks, golf courses, and school yards. Also, this type of effluent is used for irrigation of certain food crops and irrigation of pastures for milking animals. *See* 30 TAC § 210.32.

There are factors in addition to the disinfection by chlorine that make conditions unfavorable for any pathogens that might be present in wastewater. Factors that affect survival after the treatment process include temperature (shorter survival at higher temperatures), humidity (shorter survival at lower humidity), and pH, amount of rainfall, amount of sunlight (solar radiation is detrimental to survival) and the competitive natural microbic fauna and flora. Effluent irrigation is widely practiced and where properly implemented, use is generally accepted in public urban and agricultural areas. The proposed quality of the effluent after treatment is consistent with the quality of the effluent used in spray irrigation systems that are approved in this geographical area of the state.

Comment 13:

There are concerns about nuisance odor conditions from the proposed facility and what procedures will be in place to prevent or to protect the environment if nuisance odor conditions should occur.

Response 13:

TCEQ rules require that domestic wastewater treatment facilities meet buffer zone requirements for the abatement and control of nuisance odor conditions. *See* 30

TAC § 309.13(e). According to the application, the Applicant owns the required buffer zone area. Nuisance odor is not expected to occur as a result of the permitted activities at the facility if the permittee operates the facility in compliance with TCEQ's rules and the terms and conditions of the draft permit.

Individuals are encouraged to report any concerns about nuisance odor issues or suspected noncompliance with the terms of any permit or other environmental regulation by contacting the San Antonio Regional Office at 210-490-3096, or by calling the 24-hour toll-free Environmental Complaints Hotline at 1-888-777-3186. TCEQ investigates all complaints received. If the facility is found to be out of compliance with the terms and conditions of its permit, it is subject to TCEQ enforcement protocol.

Comment 14:

There was a comment that the Applicant be required to provide recycle/reuse water treated to an acceptable standard for beneficial use by the residents of the new subdivision. Another commenter suggested that TCEQ require the facility to be built utilizing "purple pipe" technology, which would allow re-use water to be cycled through homes a second time prior to being land applied.

Response 14:

The Texas Water Code (TWC) authorizes TCEQ to issue permits for discharges into or adjacent to water in the state. *See* TWC § 26.027. While beneficial reuse of effluent from treated domestic wastewater is encouraged there are no state requirements that mandate the beneficial reuse of treated wastewater. It is the responsibility of the Applicant to decide what to do with the effluent from the facility consistent with the TWC and the Texas Surface Water Quality Standards. As previously discussed in an earlier response, 30 TAC Chapter 210 provide a mechanism for a permittee to obtain authorization to reuse its effluent if it meets certain conditions, including having a valid permit.

Comment 15:

It was noted that there was a discrepancy in the application regarding the distance from the proposed facility to the City of Fair Oaks Ranch wastewater treatment plant (WWTP). The commenter states that the city WWTP was only 2 miles away rather

than over 3 miles away from the proposed facility. There was also a question asking how this application encourages, promotes, and supports area-wide waste collection, treatment, and disposal systems. There was also a comment that the application did not include certified letters to and from the Fair Oaks Ranch WWTP regarding whether they would be willing to allow the Applicant to connect to this facility. Additionally, the application did not include an analysis of the cost of connecting to the Fair Oaks Ranch WWTP or the cost of expanding the Fair Oaks Ranch WWTP facility to enable it to accept the waste.

Response 15:

The original permit application indicated that there were no WWTPs within three miles of the proposed facility. On November 12, 2014, TCEQ received an updated portion of the application that corrected the original representation and indicated that the City of Fair Oaks Ranch WWTP was within three miles of the proposed facility.

According to documentation submitted by the Applicant, the City Fair Oaks Ranch WWTP (WQ0011876001) was amenable to accepting the discharge, but did not have sufficient current capacity to handle the proposed waste volume without constructing a facility expansion. The Applicant is not required to provide a cost analysis of the cost of connecting to the Fair Oaks Ranch WWTP or the cost of expanding the Fair Oaks Ranch WWTP facility if the facility does not have sufficient current capacity to accept the waste.

Comment 16:

There were comments that an application to form a municipal utility district (MUD) may follow and that those requirements in 30 TAC Chapter 293 should be addressed as part of the water quality permit rather than as a separate issue.

Response 16:

TCEQ will act according to the rules and regulations regarding creation of new MUDs when an application is received to create such a district. There are no state requirements that this process must occur at this stage of development prior to construction of the proposed residential project.

Comment 17:

There were comments that the developer plans to build 600+ homes in the planned service area, but because it is located outside the city limits of Fair Oaks Ranch, it is subject to the jurisdiction of Cow Creek Groundwater Conservation District, which due to its restrictions, would limit the number of homes to approximately 86 (one water connection per 4 acres) and that this limitation would make the development fiscally infeasible. Therefore, commenters ask why TCEQ would allow the building of a WWTP that would service only 86 homes, rather than letting the development rely on individual septic systems.

Response 17:

If the number of homes in the proposed development is ultimately less than what is currently planned, then the Applicant will have to decide whether the proposed project to construct and operate a treatment facility is still financially viable. As part of the wastewater permitting process, TCEQ review is limited to water quality issues. Ancillary issues, such as funding, financial feasibility, etc. are not considered by TCEQ in its decision to issue a wastewater permit. However, note that the issuance of this permit does not exempt the Applicant from complying with all other applicable state, federal, or local regulations. It is the responsibility of the Applicant to obtain all other applicable authorizations and financing needed to utilize the permit.

Comment 18:

There was a question regarding what level of certification will be required for the operator of the WWTP and for conducting land disposal application.

Response 18:

Special Provision No. 2 in the draft permit requires the permittee use a licensed wastewater treatment facility operator(s) 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 proposed Category D facility must be operated by a chief operator or an operator holding a Category D license or higher. That means that the facility must be operated a minimum of five days per week by a licensed chief operator or an operator holding the required level of license or higher. Additionally, 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.

Comment 19:

It was noted prior to and at the public meeting that the public notice for the application failed to meet the rule requirements because the application and draft permit were not made available in Kendall County where the facility is proposed to be located, but at the Fair Oak Ranch City Hall located in Bexar County.

Response 19:

Subsequent to the public meeting on the application, the Applicant published a combined NORI and NAPD on December 19, 2014 in the *Boerne Star* to correct this notice deficiency. For this notice, the required documents for public view were posted at the Kendall County Courthouse, 201 E. San Antonio Avenue, Boerne, Texas, in the county where the facility is proposed to be located.

Comment 20:

There were further comments after the combined NORI/NAPD was published in December that the Applicant's posting of the application at the Boerne Courthouse did not contain the full correspondence from the file.

Response 20:

For the NAPD, 30 TAC § 39.411(c)(5) requires the Applicant to post "a copy of the complete application and the executive director's preliminary decision" for reviewing and copying (the NORI requires the copy of the complete application). The Applicant is not required to post the correspondence associated with the application and preliminary decision.

Comment 21:

There was a question regarding what security measures will be in place to prevent access to the WWTP or land disposal areas to animal or human intruders.

Response 21:

Chapter 217 - Design Criteria for Domestic Wastewater Systems (Subchapter M: Safety) outlines the safety aspects of a treatment facility design. Access control must be demonstrated by a completely fenced facility that has a lockable gate. Since the

proposed facility will contain an open tank it must be protected from intrusion by one of two methods. Either the Applicant must have an intruder resistant fence that is at least 8.0 feet tall made of solid material or chain-link fence, topped with at least one strand of barbed-wire or an intruder resistant fence that is at least 6.0 feet tall made of solid material or chain-link fence topped with three strands of barbed-wire. *See* 30 TAC § 217.328.

Comment 22:

There was a question regarding what laboratory the Applicant will submit its permit required samples to for analysis.

Response 22:

The Applicant is not required to identify the specific laboratory it will use to analyze required samples as part of the permit application process. However, the samples must be analyzed by a laboratory accredited by the state of Texas to perform soil sample analysis for purposes of permit compliance.

Comment 23:

There was a comment that the global positioning system (GPS) coordinates in the permit application are incorrect.

Response 23:

There was a transposition error in the original permit application regarding the GPS coordinates for the proposed facility. On November 12, 2014, TCEQ received an updated portion of the application that corrected the GPS coordinates on page 12 of 18, Section I. from latitude 29.461201 to 29.462100.

Comment 24:

There were questions regarding the source of electric power and the back-up power supply for the facility. Additionally, it was asked what safeguards would be in place in the event of power outages to prevent discharges of inadequately treated wastewater.

Response 24:

Provision No. 4 on Page 11 of the draft permit states that 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.

The Applicant submitted treatment unit dimensions that will meet the requirements of 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems for treatment units. They also submitted a description of design features (auxiliary power, alarm systems, standby and duplicate units, holding tanks, stormwater clarifiers, etc.) and functional arrangements (flexibility of piping and of valves to control flow through the plant, reliability of power source, etc.) to prevent bypasses or overflows of untreated wastewater that might result from excessive inflow or infiltration, power failure, equipment malfunction, and facility unit maintenance.

Comment 25:

There was a question regarding whether there were any endangered species identified on or near the plant site and land disposal areas and if so, what measures are proposed to protect those endangered species.

Response 25:

TCEQ does not review permit applications, such as this one, that would not authorize discharges to water in the state to determine whether there would potentially be any adverse effects on an aquatic or aquatic dependent federally endangered or threatened species. However, TCEQ may consider potential adverse effects to state listed species and will coordinate with Texas Parks and Wildlife Department (TPWD), as needed. This application is for a TLAP and the draft permit does not authorize a discharge of pollutants into water in the state.

Comment 26:

There was a question regarding how the Applicant plans to comply with Special Provisions Nos. 1-4, 6-10, and 11-25; and Operational Requirements No. 4 and 9 in the draft permit.

Response 26:

The Applicant is responsible for complying with all terms of the permit or is subject to potential TCEQ enforcement action. However, the permitting process does

not require the Applicant, unless specifically required in the permit requirements, to identify the specific methods/procedures/activities that will be used to comply with the noted requirements.

Comment 27:

There was a comment whether the Applicant would agree to supply certain information beyond what is required by the permit or applicable rules or law via a website or mail to the mailing list for this permit.

Response 27:

The Applicant may agree to provide supplemental information to interested parties beyond what is required by the permit or applicable rules by whatever means is agreed upon. However, the responsibility with enforcing compliance with such agreements is between the parties.

Comment 28:

There was a question regarding what warning systems will provided to notify the public of malfunctions at the facility and at the land disposal area.

Response 28:

The Applicant is required to comply with 30 TAC §217.323, which requires an owner to perform an analysis of operational and maintenance tasks to identify potentially hazardous situations. For those identified potentially hazardous tasks, a list of safety precautions must be prepared for each task that identifies the necessary tools needed, supplies, monitoring equipment, personal protective equipment, warning signs, and guards. These provisions are in place to provide for the safety of personal conducting the tasks and any person who might come into contact with the activity.

Provision No. 7 on Page 6 of the draft permit requires the Applicant to provide notification of noncompliance in accordance with 30 TAC § 305.125(9). Any noncompliance that may endanger human health or safety, or the environment must be reported to TCEQ orally or by fax to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission must also be provided to TCEQ within five working days. 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.

Comment 29:

There was a question asking what authority the permit writer had in granting or denying a permit application when there is overwhelming public support/opposition that is well founded.

Response 29:

The permit writer has no authority, under any circumstances, to personally make a decision on whether to grant or deny a permit application. The ultimate decision on whether to issue a permit is made by the Commission, under the appropriate rules and regulations governing the permitting process.

Comment 30:

There were questions regarding who owns the plant and disposal site under what type of legal title; who will own the plant site and land disposal area after construction; who will own the treatment facilities; and whether the Applicant has plans to change the ownership of the plant site and land disposal area in the future. Additionally, there was a question asking how a non-owner could apply for a permit.

Response 30:

When considering issuance of a TPDES permit, the ED does not consider or adjudicate property right issues. Also note that the issuance of this permit does not grant the Applicant the right or authorization to use another person's property without their consent. 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 state, federal, or local laws or regulations.

If the permit is issued by TCEQ, it is the responsibility of the Applicant to acquire any necessary property rights needed to utilize the permit.

Comment 31:

There were questions regarding the identity and professional experience of the designer of the facility, designer of the land disposal units, and the operator of the facility and land application.

Response 31:

A permittee is not required to identify or provide documentation on the expertise of any person who may design any of the features relating to this permit. However, once issued the Applicant is required to meet the facility design requirements in 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems.

Comment 32:

- A) The subdivision plat submitted to the city for approval was not the same as the one in the permit application.
- B) There was a request that TCEQ suspend any and all decisions regarding the permitting, construction, and placement of the WWTP until the master subdivision plan has been modified to comply with the City of Fair Oaks Ranch subdivision ordinances.
- C) There were comments that the subdivision plat had been disapproved three times by the City of Fair Oaks Ranch engineer.
- D) There are concerns about the impact of the new development and WWTP on local property values.
- E) There were concerns that the plant will shut down nearby businesses due to eminent domain.
- F) There are concerns about the aesthetics (appearance) of the proposed facility.
- G) There were concerns that the road infrastructure is ill-equipped to handle the resulting traffic from this development.
- H) There are concerns about noise and security lighting from the proposed facility and what procedures will be in place to prevent or to protect the environment from those conditions.

Response 32:

TCEQ does not have jurisdiction to consider any of these issues when determining whether to issue a wastewater discharge permit. The wastewater permitting process is intended to control the discharge of pollutants into or adjacent to water in the state and to protect the water quality of the state's rivers, lakes, and coastal waters.

Changes Made to the Draft Permit in Response to Comments

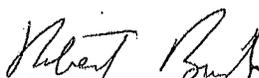
No changes were made to the draft permit in response to comments.

Respectfully submitted,

Texas Commission on Environmental Quality

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

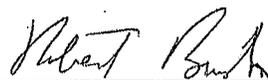
Robert Martinez, Director
Environmental Law Division

By 
Robert D. Brush, Staff Attorney
Environmental Law Division
State Bar No. 00788772

Representing the Executive Director of the
Texas Commission on Environmental Quality

CERTIFICATE OF SERVICE

I certify that on April 30, 2015 the "Amended Executive Director's Response to Public Comments" for Permit No.WQ0015219001 was filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk.


Robert D. Brush, Staff Attorney
Environmental Law Division
State Bar No. 00788772

ATTACHMENT E

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

PUBLISHED Compliance History Report for CN604516112, RN107104929, Rating Year 2014 which includes Compliance History (CH) components from September 1, 2009, through August 31, 2014.

Customer, Respondent, or Owner/Operator:	CN604516112, TRIO RESIDENTIAL DEVELOPERS, INC.	Classification: UNCLASSIFIED	Rating: -----
Regulated Entity:	RN107104929, THE RESERVE AT FAIR OAKS RANCH	Classification: UNCLASSIFIED	Rating: -----
Complexity Points:	2	Repeat Violator: NO	
CH Group:	14 - Other		
Location:	LOCATED ALONG THE NORTH RIGHT-OF-WAY OF AMMANN ROAD AT ITS INTERSECTION WITH ROLLING ACRES TRAIL IN NORTH FAIR OAKS RANCH KENDALL, TX, KENDALL COUNTY		
TCEQ Region:	REGION 13 - SAN ANTONIO		

ID Number(s):	WASTEWATER PERMIT WQ0015219001		
Compliance History Period:	September 01, 2009 to August 31, 2014	Rating Year: 2014	Rating Date: 09/01/2014
Date Compliance History Report Prepared:	July 15, 2015		
Agency Decision Requiring Compliance History:	Enforcement		
Component Period Selected:	October 01, 2009 to July 15, 2015		
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? NO
- 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:

N/A

B. Criminal convictions:

N/A

C. Chronic excessive emissions events:

N/A

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

N/A

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.

N/A

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