

Jon Niermann, *Chairman*
Emily Lindley, *Commissioner*
Bobby Janecka, *Commissioner*
Kelly Keel, *Interim Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 15, 2023

TO: All interested persons.

RE: South Central Water Company
TPDES Permit No. WQ0016060001

Decision of the Executive Director.

The executive director has made a decision that the above-referenced permit application meets the requirements of applicable law. **This decision does not authorize construction or operation of any proposed facilities.** This decision will be considered by the commissioners at a regularly scheduled public meeting before any action is taken on this application unless all requests for contested case hearing or reconsideration have been withdrawn before that meeting.

Enclosed with this letter are instructions to view the Executive Director's Response to Public Comment (RTC) on the Internet. Individuals who would prefer a mailed copy of the RTC or are having trouble accessing the RTC on the website, should contact the Office of the Chief Clerk, by phone at (512) 239-3300 or by email at chiefclk@tceq.texas.gov. A complete copy of the RTC (including the mailing list), complete application, draft permit and related documents, including public comments, are available for review at the TCEQ Central Office. Additionally, a copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at the Mammen Family Public Library, 131 Bulverde Crossing, Bulverde, Texas.

If you disagree with the executive director's decision, and you believe you are an "affected person" as defined below, you may request a contested case hearing. In addition, anyone may request reconsideration of the executive director's decision. The procedures for the commission's evaluation of hearing requests/requests for reconsideration are located in 30 Texas Administrative Code Chapter 55, Subchapter F. A brief description of the procedures for these two requests follows.

How to Request a Contested Case Hearing.

It is important that your request include all the information that supports your right to a contested case hearing. Your hearing request must demonstrate that you meet the applicable legal requirements to have your hearing request granted. The commission's consideration of your request will be based on the information you provide.

The request must include the following:

- (1) Your name, address, daytime telephone number, and, if possible, a fax number.
- (2) The name of the applicant, the permit number and other numbers listed above so that your request may be processed properly.
- (3) A statement clearly expressing that you are requesting a contested case hearing. For example, the following statement would be sufficient: “I request a contested case hearing.”
- (4) If the request is made by a group or association, the request must identify:
 - (A) one person by name, address, daytime telephone number, and, if possible, the fax number, of the person who will be responsible for receiving all communications and documents for the group;
 - (B) the comments on the application submitted by the group that are the basis of the hearing request; and
 - (C) by name and physical address one or more members of the group that would otherwise have standing to request a hearing in their own right. The interests the group seeks to protect must relate to the organization’s purpose. Neither the claim asserted nor the relief requested must require the participation of the individual members in the case.

Additionally, your request must demonstrate that you are an **“affected person.”** 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. Your request must describe how and why you would be adversely affected by the proposed facility or activity in a manner not common to the general public. For example, to the extent your request is based on these concerns, you should describe the likely impact on your health, safety, or uses of your property which may be adversely affected by the proposed facility or activities. To demonstrate that you have a personal justiciable interest, you must state, as specifically as you are able, your location and the distance between your location and the proposed facility or activities.

Your request must raise disputed issues of fact that are relevant and material to the commission’s decision on this application that were raised **by you** during the public comment period. The request cannot be based solely on issues raised in comments that you have withdrawn.

To facilitate the commission’s determination of the number and scope of issues to be referred to hearing, you should: 1) specify any of the executive director’s responses to **your** comments that you dispute; 2) the factual basis of the dispute; and 3) list any disputed issues of law.

How to Request Reconsideration of the Executive Director’s Decision.

Unlike a request for a contested case hearing, anyone may request reconsideration of the executive director’s decision. A request for reconsideration should contain your name,

address, daytime phone number, and, if possible, your fax number. The request must state that you are requesting reconsideration of the executive director's decision, and must explain why you believe the decision should be reconsidered.

Deadline for Submitting Requests.

A request for a contested case hearing or reconsideration of the executive director's decision must be **received by** the Chief Clerk's office no later than **30 calendar days** after the date of this letter. You may submit your request electronically at www.tceq.texas.gov/agency/decisions/cc/comments.html or by mail to the following address:

Laurie Gharis, Chief Clerk
TCEQ, MC-105
P.O. Box 13087
Austin, Texas 78711-3087

Processing of Requests.

Timely requests for a contested case hearing or for reconsideration of the executive director's decision will be referred to the TCEQ's Alternative Dispute Resolution Program and set on the agenda of one of the commission's regularly scheduled meetings. Additional instructions explaining these procedures will be sent to the attached mailing list when this meeting has been scheduled.

How to Obtain Additional Information.

If you have any questions or need additional information about the procedures described in this letter, please call the Public Education Program, toll free, at 1-800-687-4040.

Sincerely,



Laurie Gharis
Chief Clerk

LG/erg

Enclosure

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT
for
South Central Water Company
TPDES Permit No. WQ0016060001

The Executive Director has made the Response to Public Comment (RTC) for the application by South Central Water Company for TPDES Permit No. WQ0016060001 available for viewing on the Internet. You may view and print the document by visiting the TCEQ Commissioners' Integrated Database at the following link:

<https://www.tceq.texas.gov/goto/cid>

In order to view the RTC at the link above, enter the TCEQ ID Number for this application (WQ0016060001) and click the "Search" button. The search results will display a link to the RTC.

Individuals who would prefer a mailed copy of the RTC or are having trouble accessing the RTC on the website, should contact the Office of the Chief Clerk, by phone at (512) 239-3300 or by email at chiefclk@tceq.texas.gov.

Additional Information

For more information on the public participation process, you may contact the Office of the Public Interest Counsel at (512) 239-6363 or call the Public Education Program, toll free, at (800) 687-4040.

A complete copy of the RTC (including the mailing list), the complete application, the draft permit, and related documents, including comments, are available for review at the TCEQ Central Office in Austin, Texas. Additionally, a copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at the Mammen Family Public Library, 131 Bulverde Crossing, Bulverde, Texas.

MAILING LIST
for
South Central Water Company
TPDES Permit No. WQ0016060001

FOR THE APPLICANT:

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INTERESTED PERSONS:

See attached list.

FOR THE EXECUTIVE DIRECTOR
via electronic mail:

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TPDES PERMIT NO. WQ0016060001

APPLICATION BY THE	§	BEFORE THE
SOUTH CENTRAL WATER COMPANY	§	TEXAS COMMISSION ON
FOR	§	ENVIRONMENTAL QUALITY
TPDES PERMIT NO. WQ0016060001	§	

EXECUTIVE DIRECTOR’S RESPONSE TO PUBLIC COMMENT

The Executive Director (ED) of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comment on the application by South Central Water Company (Applicant) for a new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016060001 and on the ED’s preliminary decision on the application. As required by Title 30 of the Texas Administrative Code (30 TAC) Section (§) 55.156, before a permit is issued, the ED prepares a response to all timely, relevant, and material, or significant comments. The Office of the Chief Clerk received timely comments from Catherine Croom, Manuel James Maldonado, Cynthia Wallace, Patricia Lux Graham, Ted D. Hawkins, David Spaugh, Michelle Anna Molina, Jacqueline H. Sundt, Nathan M. Glavy, Tim Williford, David L. Wallace, Brian Zabcik, Victoria Rose, Linda D. Fawcett, Margie Hastings, Peter T. Gregg, Eric Allmon, Annalisa Peace, Nathan M. Glavy, Carlton Wenfield Sundbeck, David Michael Hixon, Edith Isaacks, Bethann Erhardt, Kelly Douglas, Jennifer Jagger Johnson, Anit Kaur, Eric Evans, Steve Hunsicker, Bulverde Neighborhood Alliance, Bulverde Neighborhoods for Clean Water, Greater Edwards Aquifer Alliance, Save Our Springs Alliance, and Yvonne L. Chapman.

This response addresses all timely public comments received, whether withdrawn or not. For 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 on the TCEQ web site at <http://www.tceq.texas.gov>.

BACKGROUND

The Applicant applied for new TPDES permit No. WQ0016060001 to authorize a discharge of treated domestic wastewater (effluent) at a daily average flow limit in Interim Phase I of 0.125 million gallons per day (MGD), at a daily average flow limit in Interim Phase II of 0.30 MGD, and at a daily average flow limit in the Final Phase of 0.60 MGD (proposed discharge) from the Applicant’s Wastewater Treatment Facility (WWTF), the Diamante Ranch WWTF (Diamante Ranch facility). Sludge generated from the Diamante Ranch facility is hauled by a registered transporter to Mount Houston Road MUD Wastewater Treatment Facility, Permit No. WQ0011154001, 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, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

Description of Facility/Discharge Route

If this permit is ultimately issued, the Diamante Ranch facility will be located approximately 4,300 feet north of the intersection of Farm-to-Market Road 1863 and Stahl Lane, in Comal County, Texas 78163 and will be an activated sludge process plant

operated in the complete mix mode with single stage nitrification. Treatment units in the Interim I and II phases will include a bar screen, an aeration basin, a final clarifier, an aerobic sludge digester, effluent filters, and a chlorine contact chamber. Treatment units in the Final phase will include a bar screen, two aeration basins, a final clarifier, two aerobic sludge digesters, effluent filters, and two chlorine contact chambers. The discharge route for the proposed discharge is via pipe to an unnamed ditch, thence to Upper Cibolo Creek in Segment No. 1908 of the San Antonio River Basin. (proposed discharge route).

Technical Review

The TCEQ has primary authority over water quality in Texas and also federal regulatory authority for the TPDES program, which controls discharges of pollutants into Texas surface waterbodies (“water in the state”). The Texas Water Code (TWC) § 26.027, authorizes the TCEQ to issue permits for discharges into water in the state, and the ED evaluates applications for discharge permits based on the information provided in the application and can recommend issuance or denial of an application based on its compliance with the TWC and TCEQ rules. Specifically, the ED’s technical review evaluates impacts from the proposed discharge on the receiving waters, starting at the discharge point (an unnamed ditch), according to 30 TAC Chapter 307, the Texas Surface Water Quality Standards (TSWQS) and the TCEQ’s *Implementation Procedures for the Texas Surface Water Quality Standards-June 2010* (IPs).

The unclassified receiving water use is minimal aquatic life use for the unnamed ditch. The designated uses for Segment No. 1908 are primary contact recreation, public water supply, aquifer protection, and high aquatic life use. The aquifer protection use applies as the facility is located in the Edwards Aquifer contributing zone. The effluent limitations in the draft permit will maintain and protect the existing instream uses. In accordance with 30 TAC § 307.5 and the TCEQ’s *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Upper Cibolo Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

The technical review process for surface water quality is conducted by staff in the ED’s Water Quality Division (WQD staff) on the Standards Implementation Team (Standards Team) and WQD staff in the Water Quality Assessment Section (Modeling Team). With the goal of the technical review being to maintain a level of water quality sufficient to protect the existing uses of the receiving surface waters, WQD staff reviewed the application in accordance with the TSWQS and TCEQ’s IPs.

The first component of the ED’s technical review involved WQD staff on the Standards Team reviewing the classifications, designations, and descriptions of the receiving surface waters for the proposed discharge. Along with other available information, reviewing the receiving waters for the proposed discharge allows the Standards Team to preliminarily determine the aquatic life uses in the area of the proposed discharge’s possible impact and assign the corresponding minimum DO criterion as stipulated at 30 TAC § 307.5 (TSWQS) and in the TCEQ’s IPs. For applications for new discharges, the Standards Team performs an antidegradation analysis of the

proposed discharge, and per 30 TAC § 307.5 (TSWQS) and the TCEQ’s IPs, an antidegradation review of the receiving waters was performed that included nutrient screening, which confirmed that total phosphorus (TP) and total nitrogen (TN) limits are needed to preclude eutrophication of Upper Cibolo Creek.

As with all determinations, reviews, or analyses related to the technical review of the proposed permit, the above and below can be reexamined and subsequently modified upon receipt of new information or information that conflicts with the bases employed in the applicable review or analysis.

The second component of the ED’s technical review involved WQD staff on the Modeling Team performing water quality modeling runs using a combination of a “calibrated” and “uncalibrated QUAL-TX” models. The proposed permit’s water quality-related effluent limits, established by the Modeling Team’s QUAL-TX modeling results, will maintain and protect the existing instream uses. Similarly, conventional effluent parameters such as DO, Five-day Carbonaceous Biochemical Oxygen Demand (CBOD₅), Total Suspended Solids (TSS), Ammonia Nitrogen (NH₃-N), Total Phosphorus (TP), and Total Nitrogen (TN) are based on stream standards and waste load allocations for water quality-limited streams as established in the TSWQS and the State of Texas Water Quality Management Plan.

Based on model results, the following effluent limits are predicted to be adequate for all three flow phases to ensure that dissolved oxygen levels will be maintained above the criteria established by the Standards Team for an unnamed ditch (2.0 mg/L):

Interim I phase (0.125 MGD): 5.0 mg/L CBOD₅, 2.0 mg/L NH₃-N, and 4.0 mg/L DO
Interim II phase (0.30 MGD): 5.0 mg/L CBOD₅, 2.0 mg/L NH₃-N, and 4.0 mg/L DO
Final Phase (0.60 MGD): 5.0 mg/L CBOD₅, 2.0 mg/L NH₃-N, and 4.0 mg/L DO

A nutrient screening was conducted on the receiving water, Upper Cibolo Creek (UCC). Based on the high nutrient screening score and site-specific factors, a nutrient limit is needed. The UCC has small instream baseflow relative to the effluent flow, shallow depths, and groundwater connectivity through fractures in the streambed, along with partial riparian shading, clear water, and impoundments downstream of the discharge. Taken together, it is likely that UCC is sensitive to nutrients. To protect public water supply, a Total Nitrogen limit of 10 mg/L is recommended in all phases. To preclude eutrophication of Upper Cibolo Creek, the Total Phosphorus limits of 0.5 mg/L, 0.25 mg/L, and 0.15 mg/L are recommended for the Interim I, II, and Final phases, respectively, as shown in the table below.

Phase	Flow (MGD)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)
Interim I	0.125	10	0.50
Interim II	0.30	10	0.25
Final	0.60	10	0.15

Coefficients and kinetics used in the model are a combination of site-specific, standardized default, and estimated values. The results of this evaluation can be reexamined upon receipt of information that conflicts with the assumptions employed in this analysis.

In all phases of the proposed permit, the pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored once per week by grab sample. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

Additionally, in all phases of the proposed permit, the effluent must contain a chlorine residual of at least 1.0 mg/l and must not exceed a total chlorine residual of 4.0 mg/after a detention time of at least 20 minutes (based on peak flow) and must be monitored five time per week by grab sample at each chlorine contact chamber. An equivalent method of disinfection may be substituted only with prior approval of the ED.

Segment No. 1908 is currently listed on the state's inventory of impaired and threatened waters (the 2020 CWA § 303(d) list). The listing is for bacteria in water from the confluence with Balcones Creek to approximately 2 miles upstream of Hwy 87 in Boerne (AU 1908_01). This facility is designed to provide adequate disinfection and, when operated properly, should not add to the bacterial impairment of the segment. In addition, in order to ensure that the proposed discharge meets the stream bacterial standard, an effluent limitation of 126 colony-forming units (CFU) or most probable number (MPN) of *Escherichia coli* (*E. coli*) per 100 ml has been added to the draft permit.

A priority watershed of critical concern has been identified in Segment No. 1908 in Comal County. The Texas wild-rice (*Zizania texana*), Comal Springs riffle beetle (*Heterelmis comalensis*), Peck's cave amphipod (*Stygobromus pecki*), fountain darter (*Etheostoma fonticola*), San Marcos gambusia (*Gambusia georgei*), San Marcos salamander (*Eurycea nana*), Texas blind salamander (*Eurycea rathbuni*), and the Comal Springs dryopid beetle (*Stygoparnus comalensis*) have been determined to occur in the contributing zone of the southern segment of the Edwards Aquifer in Segment No. 1908. To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the United States Fish and Wildlife Service's (USFWS) biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The presence of the Texas wild-rice (*Zizania texana*), Comal Springs riffle beetle (*Heterelmis comalensis*), Peck's cave amphipod (*Stygobromus pecki*), fountain darter (*Etheostoma fonticola*), San Marcos gambusia (*Gambusia georgei*), San Marcos salamander (*Eurycea nana*), Texas blind salamander (*Eurycea rathbuni*), and the Comal Springs dryopid beetle (*Stygoparnus comalensis*) requires EPA review and, if appropriate, consultation with USFWS.

Procedural Background

The TCEQ received the application on October 19, 2021, and declared it administratively complete on December 23, 2021. The Applicant published the Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) in English in the *San Antonio Express-News* on January 21, 2022, and in Spanish in *La Voz Newspaper* on January 7, 2022. The ED completed the technical review of the application on April 15, 2022, and prepared the proposed draft permit, which if approved, establishes the conditions under which the facility must operate. The Applicant published the Combined Notice of Receipt and Intent to Obtain a Water Quality Permit Notice and Notice of Application and Preliminary Decision in *San Antonio Express-News* in English on June 16, 2022, and in Spanish in *La Voz Newspaper* on July 6, 2022. The public meeting for this application was held on January 26, 2023. The public comment period ended on January 26, 2023. Because this application was received after September 1, 2015, and because it was declared administratively complete after September 1, 1999, it is subject to both the

procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999, and the procedural requirements and rules implementing Senate Bill 709, 84th Legislature, 2015, which are implemented by the Commission in its rules in 30 TAC Chapters 39, 50, and 55.

The ED has determined that the proposed permit, if issued, meets all statutory and regulatory requirements and is protective of the environment, water quality, and human health. However, if you would like to file a complaint about the Diamante Ranch facility concerning its compliance with the provisions of its permit or with TCEQ rules, you may contact the TCEQ Regional Office (Region 13) in San Antonio, Texas at (210) 545-4329 or the statewide toll-free number at 1-888-777-3186 to address potential permit violations. In addition, complaints may be filed electronically by using the methods described above in the fourth subsection of Background Information (Access to Rules, Laws, and Records). If an inspection by the Regional Office finds that the Applicant is not complying with all the requirements of the permit, or that the Diamante Ranch facility is out of compliance with TCEQ rules, enforcement actions may arise.

Access to Rules, Laws, and Records

- All administrative rules: Secretary of State Website: www.sos.state.tx.us
- TCEQ rules: Title 30 of the Texas Administrative Code: www.sos.state.tx.us/tac/ (select TAC Viewer on the right, then Title 30 Environmental Quality)
- Texas statutes: www.statutes.capitol.texas.gov
- TCEQ website: www.tceq.texas.gov (for downloadable rules in WordPerfect or Adobe PDF formats, select “Rules, Policy, & Legislation,” then “Current TCEQ Rules,” then “Download TCEQ Rules”);
- Federal rules: Title 40 of the Code of Federal Regulations (C.F.R.)
http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl
- Federal environmental laws: <http://www.epa.gov/lawsregs/>
- Environmental or citizen complaints may be filed electronically at: <https://www.tceq.texas.gov/assets/public/compliance/monops/complaints/complaints.html> (select “use our online form”) or by sending an email to the following address: complaint@TCEQ.texas.gov

Commission records for the Diamante Ranch facility are available for viewing and copying at TCEQ’s main office in Austin, 12100 Park 35 Circle, Building F, 1st Floor (Office of Chief Clerk, for the current application until final action is taken). Some documents located at the Office of the Chief Clerk may also be located in the TCEQ Commissioners’ Integrated Database at www.tceq.texas.gov/goto/cid. The permit application has been available for viewing and copying at Mammen Family Public Library, 131 Bulverde Crossing, Bulverde, Texas, since publication of the NORI. The final permit application, proposed permit, statement of basis/technical summary, and the ED’s preliminary decision are now available for viewing and copying at the same location since publication of the NAPD.

COMMENTS AND RESPONSES

Comment 1:

Manuel James Maldonado on behalf of Bulverde Neighborhood Alliance (BNA), Steve Hunsicker, Eric Evans, Anit Kaur, Jacqueline H. Sundt, Kelly Douglas, Bethann Erhardt, Edith Isaacks, Tim Williford, Carlton Wenfield Sundbeck, Annalisa Peace and Nathan M. Glavy on behalf of Greater Edwards Aquifer Alliance (GEAA), Margie Hastings,

Michelle Molina and Bulverde Neighborhoods for Clean Water (BNCW), Patricia Graham, Jennifer Jagger Johnson, Linda D. Fawcett, Victoria Rose on behalf of Save Our Springs Alliance (SOS), David Spaugh, Yvonne L Chapman, and David Wallace provided comments expressing concerns about the draft permit's potential impact to groundwater and local aquifers, including impacts from pharmaceuticals. The commentors are concerned that the location of the facility is in the flood plain, that the permit violates the State's rules for the Edwards recharge zone and suggest this could result in negative impacts to wetlands as well as karst structures or features.

Response 1:

According to section 26.401(b) of the Texas Water Code, the Texas Legislature has determined that "it is the goal of groundwater policy in this state that the existing quality of groundwater not be degraded." Under subsection (c)(1), it is the State of Texas's policy that "discharges of pollutants, disposal of wastes, or other activities subject to regulation by state agencies be conducted in a manner that will maintain present uses and not impair potential uses of groundwater or pose a public health hazard." The TCEQ has been tasked with the responsibility of regulating discharges of pollutants into water in the state. The agency's Water Quality Division, which is responsible for reviewing discharge permit applications and drafting permits that will be protective of human health and the environment, has determined that if surface water quality will be protected under a draft permit, groundwater quality in the vicinity will not be impacted by the discharge.

When someone files a permit application for a wastewater discharge to surface water in the state, the TCEQ's Water Quality Division subjects the application to a thorough technical review. Following that review of the application, ED staff draft a permit with effluent limits that will ensure the discharge meets the applicable federal and state statutes, rules, and procedural requirements, including the Texas Surface Water Quality Standards (Standards) in chapter 307 of the TCEQ's rules,¹ to protect water quality and maintain the receiving waters' existing uses. This also ensures the discharge will be protective of aquatic life, human health, and the environment. Here, because the effluent limits in the draft permit will maintain the existing uses of the surface waters along the discharge route and preclude degradation, they will also prevent adverse impacts on groundwater, which includes conveyance via karst features.

The TCEQ's Water Quality Division has determined that if surface water quality is protected under a discharge permit, the groundwater quality in the vicinity should not be impacted by the discharge. The technical review process for surface water quality is conducted by the Water Quality Division's Standards Implementation Team and Water Quality Assessment Team. The Standards Implementation reviewer determines the uses of the receiving waters, and the Assessment modeler establishes effluent limits that are protective of those uses. For this application, the unclassified receiving water use is minimal aquatic life use for the unnamed ditch. The designated uses for Segment No. 1908 are primary contact recreation, public water supply, aquifer protection, and high aquatic life use. The aquifer protection use applies as the facility is located in the Edwards Aquifer contributing zone. In accordance with 30 Texas Administrative Code Section 307.5 and the TCEQ's *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality

¹ All TCEQ rules are located in title 30 of the Texas Administrative Code. Please see section I(C) for information regarding how to access the rules.

uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Upper Cibolo Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. Treated effluent discharged in accordance with the requirements of the draft permit is protective of surface water uses and, therefore, is protective of groundwater.

As specified in the TSWQS, water in the state must be maintained to preclude adverse toxic effects on aquatic life, terrestrial life, livestock, and domestic animals resulting from contact, consumption of aquatic organisms, consumption of water, or any combination of the three. In addition, water in the state must be maintained to preclude adverse toxic effects on human health resulting from contact recreation, consumption of aquatic organisms, consumption of drinking water, or any combination of the three. The draft permit has been designed to ensure that these quality standards would be maintained which will protect the groundwater, wetlands, and protect against aquifer contamination.

TPDES permits establish terms and conditions that are intended to provide water quality pollution control. Therefore, the ED's review of an application for a TPDES permit focuses on controlling the discharge of pollutants into water in the state. TCEQ does not have the authority to regulate flooding in the wastewater permitting process unless there is an associated water quality concern. The draft permit includes effluent limits and other requirements that it must meet even during rainfall events and periods of flooding. Additionally, according to the application, the proposed facility is located above the 100-year flood plain. For additional protection, the draft permit includes Other Requirement No. 4, which requires the Applicants to provide protection for the facility from a 100-year flood. Finally, the draft permit does not authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. As stated in subsection C of the Background Information (Access to Rules, Laws, and Records), the proposed permit does not limit any landowner's ability to seek private action against the Applicants.

The TCEQ has not investigated the potential effects of emerging contaminants, which includes Pharmaceuticals and Personal Care Products (PPCPs), in effluent. Neither the TCEQ nor the EPA has promulgated rules or criteria limiting emerging contaminants in wastewater. The EPA is investigating emerging contaminants, and has stated that scientists have not found evidence of adverse human health effects from emerging contaminants in the environment. Removal of some emerging contaminants has been documented during municipal wastewater treatment; however, standard removal efficiencies have not been established. In addition, there are currently no federal or state effluent limits for emerging contaminants. So while the EPA and other agencies continue to study the presence of PPCPs, there is currently no clear regulatory regime available to address the treatment of PPCPs in domestic wastewater. Accordingly, neither the TCEQ nor the EPA has rules on the treatment of contaminants such as pharmaceuticals in domestic wastewater.

Comment 2:

BNA, Steve Hunsicker, Eric Evans, Anit Kaur, Jacqueline H. Sundt, Kelly Douglas, Bethann Erhardt, Edith Isaacks, and Carlton Wenfield Sundbeck expressed concerns about the draft permit's potential to create odor and are concerned about the buffer zone. TCEQ received additional comments which expressed concerns about suitability requirements of 30 TAC § 309.13.

Response 2:

Section 309.13(e) of the TCEQ's rules requires domestic facilities to meet buffer zone requirements for the abatement and control of nuisance odor by complying with one of three options: 1) ownership of the buffer zone area; 2) restrictive easements from the adjacent property owners for any part of the buffer zone not owned by the applicant; or 3) providing nuisance odor control. According to South Central Water Company (SCWC) application, the applicant will abate and control nuisance odor by ownership of the buffer zone area, i.e., by locating the treatment units at least 150 feet from their property line. This requirement was incorporated into the draft permit at Other Requirement No. 3. Because SCWC owns the buffer zone, nuisance odor is not expected to occur as a result of the permitted activities at the facility provided SCWC operates the facility in compliance with TCEQ rules and the terms and conditions of the draft permit (Draft permit, Attachment 3A, 3B and 3C - Buffer Zone Maps). Further, 30 TAC § 309.13(c) states that a treatment unit at the Diamante Ranch facility may not be located closer than 500 feet from a public water well nor 250 feet from a private water well.

In addition, the draft permit does not limit any affected person's ability to seek legal remedies against the Applicant regarding any potential trespass, nuisance, or other causes of action in response to activities that may result in injury to human health or property or that interfere with the normal use and enjoyment of property. If anyone experiences nuisance odor conditions or any other suspected incidents of noncompliance with the permit or TCEQ rules, they may report those conditions or incidents to the TCEQ by: calling 888-777-3186; calling the San Antonio Regional office at 210-490-3096, or by using our online form <https://www.tceq.texas.gov/assets/public/compliance/monops/complaints/complaints.html>. For additional information regarding environmental complaints, please see: <https://www.tceq.texas.gov/compliance/complaints>.

Comment 3:

BNA, Steve Hunsicker, Eric Evans, Anit Kaur, Jacqueline H. Sundt, Kelly Douglas, Bethann Erhardt, Edith Isaacks, Carlton Wenfield Sundbeck, and SOS provided comments suggesting the permit will prevent the use and enjoyment of their property.

Response 3:

The TCEQ does not have jurisdiction to address this issue as part of the wastewater permitting process. While the Texas Legislature has given the TCEQ the responsibility to protect water quality, the water quality permitting process is limited to controlling the discharge of pollutants into or adjacent to water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters. However, the proposed permit does not authorize any invasion of personal rights or any violation of federal, state, or local laws. It also does not limit the ability of nearby landowners to use common law remedies for trespass, nuisance, or other causes of action in response to activities that may or do result in injury or adverse effects on human health or welfare, animal life, vegetation, or use and enjoyment of property or that may or actually do interfere with the normal use and enjoyment of animal life, vegetation, or property.

Comment 4:

BNA, Steve Hunsicker, Eric Evans, Anit Kaur, Jacqueline H. Sundt, Kelly Douglas, Bethann Erhardt, Edith Isaacks, Carlton Wenfield Sundbeck, and Margie Hastings

provided comments regarding the concern the permit could attract nuisance animals, including wild hogs.

Response 4:

The health concerns of area residents, as well as those of the public, are considered in reviewing permit applications for domestic wastewater discharge. The TCEQ takes the concerns and comments expressed by the public, relating to human health, water quality, and protecting the State’s rivers and lakes, into consideration in deciding whether to issue a wastewater discharge permit.

Chapter 26 of the TWC and TCEQ’s water quality standards are written for the protection of public health, aquatic life, and the environment. Accordingly, the stated policy of both the Water Code and the TSWQS is:

to maintain the quality of water in the state consistent with the public health and enjoyment, the propagation and protection of terrestrial and aquatic life, and the operation of existing industries, taking into consideration the economic development of the state; to encourage and promote the development and use of regional and area-wide waste collection, treatment, and disposal systems to serve the waste disposal needs of the citizens of the state; and to require the use of all reasonable methods to implement this policy.²

The proposed permit also requires the Applicant to “take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health.”

WQD staff evaluated the application as an authorization to discharge treated wastewater into water in the State. Thus, the quality of the discharge and method of achieving that quality must follow the Federal Clean Water Act, TWC, and the TSWQS.

The TSWQS is a primary mechanism for the TCEQ to protect human health, surface and groundwater quality, aquatic life, the environment, and specifically, the designated uses of the receiving waters. The TSWQS require that discharges not cause surface waters to be toxic to aquatic life, terrestrial wildlife, livestock, or domestic animals, not degrade receiving waters, and not result in situations that impair existing, attainable, or designated uses. Likewise, the TPDES program mandates that discharges of treated effluent into water in the state from facilities regulated by TPDES permits meet the requirements of the TSWQS.

As specified in the methodologies from the TCEQ IPs, TPDES permits issued by the TCEQ must maintain water in the state to preclude adverse toxic effects on human health resulting from contact recreation, consumption of aquatic organisms, consumption of drinking water, or any combination of the three. Relatedly, municipal facilities typically do not have industrial contributors, and therefore, do not have toxins in their effluent. In addition, permits must prevent adverse toxic effects on aquatic life, terrestrial life, livestock, and domestic animals resulting from contact, consumption of aquatic organisms, consumption of water, or any combination of the three. The design of the proposed permit ensures these water quality standards will be met.

Comment 5

BNA, GEAA, David Michael Hixon, Margie Hastings, Patricia Graham, BNCW, Jennifer Jagger Johnson, Linda D. Fawcett, and SOS expressed concerns about the draft

² Texas Water Code § 26.003 and 30 TAC § 307.1.

permit's impact on surface water quality (including dissolved oxygen) and the impact to an impaired creek with bacteria. They further raised concerns about the permit complying with the Edwards Aquifer rules.

Response 5:

Effluent discharged into water in the state from facilities regulated under the TPDES is required to meet the TSWQS. The TSWQS and other applicable rules are protective of aquatic life, human health, and the environment, including the designated uses of the receiving waters. The draft permit meets these TSWQS requirements, and the TCEQ does not anticipate that constituents in the discharge will have an adverse effect on the receiving water or its designated uses. The effluent limitations in the draft permit are designed to maintain and protect the existing instream uses and were derived from a series of rigorous technical reviews performed in accordance with the Procedures to Implement the Texas Surface Water Quality Standards. The advanced treatment levels that apply to the proposed discharge are expected to maintain the current water quality and protect the existing instream uses. The draft permit includes effluent limits and monitoring requirements for five-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), ammonia nitrogen (NH₃-N), Total Phosphorus (TP), Total Nitrogen (TN), chlorine residual, and pH to ensure that the proposed effluent limits will not result in a violation of the TSWQS, thereby protecting surface water quality, groundwater, and human health. It also includes additional requirements for the wastewater treatment system to ensure the protection of water quality, wildlife, and human health and for the disposal of domestic sludge generated by the wastewater treatment facility.

Based on the technical review, the Executive Director determined that the draft permit is protective of the environment, water quality, and human health. The Executive Director concluded that the draft permit complies with all TCEQ rules and requirements if the Applicant operates and maintains the facility as required by the draft permit.

The proposed effluent limits of 5.0 mg/L CBOD₅, 5.0 mg/L TSS, 2.0 mg/l NH₃-N, 0.15 mg/L TP, 10 mg/L TN, and 4.0 mg/l minimum effluent DO are predicted to be adequate to ensure that instream DO concentrations will be maintained above these levels. Since the discharge is directly to an unclassified water body, the permit action was reviewed in accordance with § 307.4(h) and (l) of the 2018 Texas Surface Water Quality Standards and the TCEQ's implementation procedures for the standards. Based on a receiving water assessment and/or other available information, a preliminary determination of the aquatic life uses in the area of the discharge impact has been performed and the corresponding dissolved oxygen criterion assigned.

The 126 CFU bacteria limit is consistent with the primary contact recreation criterion. Additionally, the draft permit requires disinfection via chlorination, which is intended to keep the bacteria concentrations below this effluent limit. Chlorine is one of the most practical and effective means of disinfection because it can kill disease-causing bacteria and nuisance organisms and can eliminate certain noxious odors during disinfection.³ The Water Quality Division has determined that the draft permit is in accordance with the TSWQS, which ensures that the effluent discharge is protective of aquatic life, human health, and the environment.

The rules in 30 TAC § 309.3(g)(1) require that disinfection of domestic wastewater must be protective of both public health and aquatic life, however the rules do not

³ U.S. EPA *Wastewater Technology Fact Sheet- Chlorine Disinfection* (EPA 832-F-99-062)

require a specific method of disinfection. A permittee may disinfect domestic wastewater through use of chlorination, ultra-violet (UV) light, or an equivalent method of disinfection with prior approval of the Executive Director. In this case, the Applicant has chosen chlorination system for disinfection purposes, and must comply with the design requirements in 30 TAC Chapter 217, Subchapter L. Specifically, 30 TAC §§ 217.291-300 specify the requirements for the sizing, configuration, dosage, system details, controls, cleaning, safety, and minimum replacement parts for chlorination disinfection units.

Additionally, 30 TAC § 217.37 requires a disinfection system to include a backup power system capable of providing sufficient power to operate continuously during all power outages. The draft permit also includes bacteria limits and monitoring requirements to verify proper disinfection. The treated effluent shall meet a daily average bacteria limit of 126 colony-forming units or most probable number of *Escherichia coli* (*E. Coli*) per 100 ml. The effluent shall be sampled for bacteria two/month.

The proposed effluent limits of 5.0 mg/L CBOD₅, 5.0 mg/L TSS, 2.0 mg/l NH₃-N, 0.5/0.25/0.15 mg/L TP (Interim I, Interim II and Final phase), 10 mg/L TN and 4.0 mg/l minimum effluent DO are consistent with the requirements of the Edwards Aquifer Rules (30 TAC Chapter 213, Subchapter A), which require effluent limits of 5.0 mg/L TSS and 1.0 mg/L total phosphorus, at a minimum.

The TCEQ has developed rules for regulated activities on the Edwards Aquifer recharge and contributing zones under 30 TAC Chapter 213 (Edwards Aquifer). These rules authorize the discharge of treated wastewater within the contributing zone of the Edwards Aquifer, and specify effluent limits for those facilities located within 10 miles of the recharge zone. The TCEQ's Edwards Aquifer Rules prohibit the direct discharge of municipal and industrial wastewater discharges on the Edwards Aquifer Recharge Zone into or adjacent to water in the state that would create additional pollutant loading⁴. However, the TCEQ has established minimum effluent treatment levels for new or increased discharges of treated wastewater into or adjacent to water in the state, other than industrial wastewater discharges, within zero to five miles upstream from the Recharge Zone⁵ and for new or increased discharges into or adjacent to water in the state, other than industrial wastewater discharges, more than five miles but within 10 miles upstream from the Recharge Zone.⁶ The draft permit limits are in compliance with 30 TAC Chapter 213.

Comment 6:

GEAA, BNCW, Jennifer Jagger Johnson, SOS, Brian Zabcik on behalf of Save Barton Creek Association (SBCA), Tim Williford on behalf of Texas Water Utilities (TWC), and Yvonne L. Chapman provided comments expressing concerns about the draft permit's effluent limits including phosphorous. Expressing other concerns about algae and disinfection methods, the commentators requested that the applicant be required to pursue a TLAP instead of TPDES permit.

Response 6:

The draft permit was developed to protect aquatic life, human health, and the environment in accordance with the TCEQ's Water Quality Standards as long as the

⁴ 30 TEX. ADMIN. CODE § 213.8(a)(6)

⁵ 30 TEX. ADMIN. CODE § 213.6(c)(1)

⁶ 30 TEX. ADMIN. CODE § 213.6(c)(2)

applicant operates and maintains the facility according to TCEQ rules and the requirements in the draft permit. As part of the permit application process, the TCEQ must determine the uses of the receiving waters and set effluent limits that are protective of those uses. The effluent limits of 5.0 mg/L CBOD₅, 5.0 mg/L TSS, 2.0 mg/l NH₃-N, 0.5/0.25/0.15 mg/L TP (Interim I, Interim II and Final phase), 10 mg/L TN and 4.0 mg/l minimum effluent DO in the draft permit were set to maintain and protect the existing instream uses. In this case, the receiving stream use is minimal aquatic life use for the unnamed ditch, and the designated uses are primary contact recreation, public water supply, aquifer protection, and high aquatic life use. The ED determined these uses will be protected if the treatment facility is operated and maintained as required by the draft permit and applicable regulations.

Total phosphorus (TP) and Total Nitrogen (TN) from this facility was not a concern based on characteristics of the receiving waters. These characteristics include an intermittent stream with relatively heavy shading from tree canopy, mud or sand bottom, and turbid waters, which are not typically conducive to increased algal growth; similar facilities that discharge to the same receiving waters do not have TP limits. However, the preliminary determination can be reexamined and may be modified if new information is received.

Additional protection of human health comes from the rule in 30 TAC § 309.3(g)(1) (Disinfection), which requires disinfection of domestic wastewater into water in the state in a manner conducive to the protection of both public health and aquatic life. The rules do not mandate a specific method of disinfection, as a permittee may disinfect domestic wastewater through use of 1) chlorination, 2) ultra-violet light, or 3) an equivalent method of disinfection with prior approval from the ED. Whichever form is used, the design criteria for chemical disinfection by chlorine, including safety requirements, in 30 TAC Chapter 217, Subchapter K must be observed. Therefore, in accordance with the TCEQ rules (30 TAC § 309.3(g)(1)), the proposed permit requires the treated effluent to be disinfected prior to discharge in a manner conducive to protect both the public health and aquatic life.

The Texas Water Code § 26.121, authorizes discharges into waters of the state, provided the discharger obtains a permit from the Commission. The Executive Director does not have the authority to mandate a different discharge location or different type of wastewater treatment plant. The Executive Director evaluates applications for wastewater treatment plants based on the information provided in the application. As discussed elsewhere in this RTC, the Executive Director evaluated the SCWC application according to all applicable statutory and regulatory requirements and determined that, if properly operated, the SCWC will not negatively impact human health or the environment.

Comment 7:

BNA provided comments expressing concerns about eutrophication.

Response 7:

The Executive Director has included a total nitrogen limit of 10 mg/L in the draft permit to provide protection of drinking water and meet the drinking water standard of 10 mg/L nitrate-nitrogen. Since nitrate is a component of total nitrogen, and the total nitrogen limit is 10 mg/L, the discharge will meet the drinking water standard of 10 mg/L nitrate-nitrogen. Additionally, the total nitrogen limit will further minimize the potential for eutrophication.

Comment 8:

BNA provided comments expressing concerns about Polyfluorinated Substances (PFAS).

Response 8:

Neither the TCEQ nor the EPA has promulgated rules or criteria limiting emerging contaminants in wastewater. Removal of some emerging contaminants has been documented during municipal wastewater treatment; however, standard removal efficiencies have not been established. In addition, there are currently no federal or state effluent limits for emerging contaminants. So, while the EPA and other agencies continue to study the presence of PFAS, there is currently no clear regulatory regime available to address the treatment of PFAS in domestic wastewater.

Comment 9:

BNA, GEAA, BNCW, Jennifer Jagger Johnson, SOS, Ted D. Hawkins, and TWC provided comments expressing concerns about regionalization, the justification of need in the application, and beneficial reuse. Comments were also received from these same commenters about whether applicants can apply for 210 authorization while applying for a TPDES permit.

Response 9:

Under section 26.081 of the Texas Water Code, the TCEQ must “encourage and promote the development and use of regional and area-wide waste collection, treatment, and disposal systems to serve the waste disposal needs of the citizens of the state and to prevent pollution and maintain and enhance the quality of the water in the state.” Additionally, section 26.0282 of the Texas Water Code provides the following:

In considering the issuance, amendment, or renewal of a permit to discharge waste, the commission may deny or alter the terms and conditions of the proposed permit, amendment, or renewal based on consideration of need, including the expected volume and quality of the influent and the availability of existing or proposed areawide or regional waste collection, treatment, and disposal systems not designated as such by commission order pursuant to provisions of this subchapter. This section is expressly directed to the control and treatment of conventional pollutants normally found in domestic wastewater.

The ED evaluates regionalization inquiries when an applicant files an application for a new permit or an application for a major amendment to an existing permit to increase flow. In these instances, if there is a wastewater treatment facility or collection system within three miles of the proposed facility, the applicant is required to provide information to the ED as to whether the nearby facility has sufficient existing capacity to accept the additional volume of wastewater proposed in the application. If such a facility exists and it is willing to accept the proposed waste, the applicant must provide an analysis of expenditures required to connect to the existing wastewater treatment facility. Additionally, the applicant is required to provide copies of all correspondence with the owners of the existing facilities within three miles of the proposed facility regarding connecting to their systems.

The TCEQ’s policy on regionalization does not require the agency to deny a wastewater discharge application on the basis that there is a pending application for a regional plant within three miles of a proposed facility. Additionally, the fact that a facility or collection system is located within three miles of a proposed facility is not an

automatic basis to deny an application. For example, the ED has approved new discharges or major amendments to increase flow in situations where the applicant has provided an economic justification by demonstrating that connecting to the existing facility would be prohibitively expensive.

On January 11, 2023, the Applicant mailed certified letters requesting service to two public sewer supply systems within the 3-mile radius. According to the Applicant, there has been no response yet from 'Lennar Homes of Texas Land and Construction, Ltd' and 'DHJB Development LLC'. Therefore, on Page 22 of the Domestic Technical Report 1.1, the Applicant answered that there were there (3) domestic wastewater treatment facilities or collection systems located within three (3) miles of the proposed facility, and one of them is owned by the 'South Central Water Company', are not willing to accept the proposed volume of wastewater. Accordingly, the ED concluded that the Applicant's draft permit in this case is consistent with the Commission's regionalization policy.

The TCEQ's rules applicable to the beneficial reuse of reclaimed water are found in 30 TAC Chapter 210. 30 TAC § 210.5(a) was amended in March of 2023 to clarify that an application to obtain an authorization under Chapter 210 may be submitted concurrently with an application for a permit to treat and dispose of wastewater. However, the TCEQ does not have the authority to require a permittee to obtain a Chapter 210 reuse authorization. TCEQ does not have the authority to mandate the method of disposal of treated effluent if an applicant adheres to the rules and provisions of Texas Water Code (TWC) Chapter 26 and 30 TAC Chapters 217, 305, 307, and 309.

Comment 10:

GEAA, Margie Hastings, and BNA provided comments expressing concerns about the accuracy of the information in the Application regarding facility location, discharge route, and adjacent landowners.

Response 10:

The permit application, while critical to the technical review of the permit, is not the only source of information TCEQ relies upon to make its effluent limit determinations and permit conditions. Answers to the questions in Worksheet 2.0 of the domestic permit application are often based on the best information available to the Applicant and may need to be supplemented with information from the general public or other entities. TCEQ staff examine the receiving stream using tools such as aerial imagery and geographic information systems (GIS) data to characterize and measure the downstream waterbodies.

Regarding facility location and discharge route, TCEQ does not have the resources to visit every proposed site that applies for a TPDES application. However, the discharge route was evaluated via a desktop review that included information from United States Geological Survey (USGS) maps, aerial photography, information from reviews of nearby facilities, and information in the application.

Additionally, the TCEQ's notice rules for a new permit or major amendment require mailed notice of the NORI and Notice of Application and Preliminary Decision (NAPD) to landowners named on the application map and persons on the mailing list maintained by the Office of the Chief Clerk.⁷ The applicant is required to submit a

⁷ See 30 TEX. ADMIN. CODE §§ 39.413, 39.418, 39.419, and 39.551.

landowner map as part of the application materials. The landowner map must include the property boundaries of landowners surrounding the applicant's property and the property boundaries of all landowners surrounding the discharge point and on both sides of the discharge route for one full stream mile downstream of the discharge point. The landowner map provided by the applicant did not indicate Ms. Margie Hastings as being an adjacent landowner. Therefore, she was not included on the mailing list for this application. Any persons who submits a comment or contested case hearing request prior to the end of the public comment period are added to the mailing list for that permit action.

In accordance with TCEQ's notice rules, two public notices were published for the submitted application. The Applicant published the NORI in the *San Antonio Express-News* in English on June 16, 2022, and in Spanish in *La Voz Newspaper* on July 6, 2022, and the NAPD in *New Braunfels Herald-Zeitung* newspaper in English on December 23, 2022, and in Spanish in *New Braunfels Herald-Zeitung* newspaper on December 23, 2022.

Comment 11:

BNA, Patricia Graham, BNCW, Jennifer Jagger Johnson, SOS, and Jacqueline H. Sundt provided comments expressing concerns about aquatic life, including endangered and threatened species, as well as livestock.

Response 11:

The Texas Surface Water Quality Standards (TSWQ) in 30 TAC Chapter 307 require that discharges may not degrade the receiving waters and may not result in situations that impair existing, attainable, or designated uses, and that surface waters not be toxic to aquatic life, terrestrial wildlife, livestock, or domestic animals. The draft permit was developed in accordance with the TSWQS to be protective of water quality, provided that the Applicant operates and maintains the proposed facility according to TCEQ rules and the draft permit's requirements. The methodology outlined in the *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010) is designed to ensure compliance with the TSWQS. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that 1) results in instream aquatic toxicity, 2) causes a violation of an applicable narrative or numerical state water quality standard, 3) results in the endangerment of a drinking water supply, or 4) results in aquatic bioaccumulation that threatens human health. The ED has made a preliminary determination that the draft permit, if issued, meets all statutory and regulatory requirements.

A priority watershed of critical concern has been identified in Segment No. 1908 in Comal County. The Texas wild-rice (*Zizania texana*), Comal Springs riffle beetle (*Heterelmis comalensis*), Peck's cave amphipod (*Stygobromus pecki*), fountain darter (*Etheostoma fonticola*), San Marcos gambusia (*Gambusia georgei*), San Marcos salamander (*Eurycea nana*), Texas blind salamander (*Eurycea rathbuni*), and the Comal Springs dryopid beetle (*Stygoparnus comalensis*) have been determined to occur in the contributing zone of the southern segment of the Edwards Aquifer in Segment No. 1908. To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the United States Fish and Wildlife Service's (USFWS) biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. Furthermore, the EPA has reviewed the draft permit and did not provide TCEQ with any objections.

Finally, The Texas Parks and Wildlife Department (TPWD) is the state agency that oversees and protects wildlife and their habitat. TPWD received notice of the permit application pursuant to 30 TAC § 39.413(5). They can be contacted by phone at 1-800-792-1112 or by mail at 4200 Smith School Road, Austin, Texas 78744.

Comment 12:

BNA and Jacqueline H. Sundt provided comments expressing concerns about concentrated feces, carcasses, as well as other animal debris that exists in the stream and whether the ED has evaluated their impacts to water quality .

Response 12:

The application proposes the treatment of domestic wastewater and the draft permit, if approved, will authorize the discharge of effluent in accordance with the terms and conditions of the draft permit. ED staff prepared the draft permit based on site specific conditions described in the application and other monitoring tools at the agency's disposal. The materials described in the above comment were not observed.

Comment 13:

Steve Hunsicker, Eric Evans, Anit Kaur, Jacqueline H. Sundt, Kelly Douglas, Bethann Erhardt, Edith Isaacks, and Carlton Wenfield Sundbeck provided comments expressing concerns about traffic.

Response 13:

The TCEQ does not have the authority to address these types of issues as part of the wastewater permitting process. While the Texas Legislature has given the TCEQ the responsibility to protect water quality, the water quality permitting process is limited to controlling the discharge of pollutants into or adjacent to water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters. The TCEQ cannot consider issues such as noise and traffic in the review of a TPDES application.

Comment 14:

GEAA, Margie Hastings, BNCW, Jennifer Jagger Johnson, BNA, Patricia Lux Graham, Yvonne L. Chapman, and David Wallace provided comments expressing concerns about cumulative impacts of multiple WWTPS on Cibolo creek.

Response 14:

A nutrient screening was conducted on the receiving water, Upper Cibolo Creek (UCC). Based on the high nutrient screening score and site-specific factors, a nutrient limit is needed. The UCC has small instream baseflow relative to the effluent flow, shallow depths, and groundwater connectivity through fractures in the streambed, along with partial riparian shading, clear water, and impoundments downstream of the discharge. Taken together, it is likely that UCC is sensitive to nutrients. To protect public water supply, a Total Nitrogen limit of 10 mg/L is recommended in all phases. To preclude eutrophication of Upper Cibolo Creek, the Total Phosphorus limits of 0.5 mg/L, 0.25 mg/L, and 0.15 mg/L are recommended for the Interim I, II, and Final phases, respectively, as shown in the table below.

Phase	Flow (MGD)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)
Interim I	0.125	10	0.50
Interim II	0.30	10	0.25
Final	0.60	10	0.15

The Executive Director evaluates each permit application and action individually to ensure the permits are protective of surface water quality. Potential combined and cumulative surface water impacts are considered during the dissolved oxygen modeling analysis. The dissolved oxygen modeling analysis evaluates the potential direct impact on instream dissolved oxygen levels of oxygen-demanding substances that are expected to be present in a treated wastewater discharge. These cumulative dissolved oxygen impacts typically occur primarily when there are very large discharges involved, if there are two or more discharges within a relatively close proximity to each other, or if there are numerous discharges widespread within a larger watershed area. The dissolved oxygen modeling analysis conducted as part of this review evaluated not only the impacts of the proposed discharge, but also discharges upstream of the discharge point along Upper Cibolo Creek and dischargers in the San Antonio River Basin watershed contained in the Waste Load Evaluation model for Segment No. 1908. Even considering the cumulative impacts of these discharges, the dissolved oxygen modeling analysis results indicated that the dissolved oxygen criteria of 2.0 mg/L and 5.0 mg/L for the unnamed ditch and Cibolo Creek, respectively, would be maintained for the effluent limits contained in the draft permit.

Comment 15:

BNCW, Patricia Graham, Jennifer Jagger Johnson, BNA, and SOS provided comments expressing concerns about human health.

Response 15:

The proposed draft permit was developed in accordance with the Texas Surface Water Quality Standards (TSWQS) found in title 30, chapter 307 of the Texas Administrative Code. These standards were designed to maintain the quality of water in the state and to be protective of human health and the environment. Section 307.4(d) of the TSWQS states, "Surface waters will not be toxic to man from ingestion of water, consumption of aquatic organisms, or contact with the skin, or to terrestrial or aquatic life." The methodology outlined in the TCEQ's "Procedures to Implement the TSWQS" (IPs) ensures compliance with the requirements of chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater which (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health.

The TCEQ's Water Quality Division has determined that if surface water quality is protected under a discharge permit, the groundwater quality in the vicinity should not be impacted by the discharge. The technical review process for surface water quality is conducted by the Water Quality Division's Standards Implementation Team and Water Quality Assessment Team. The Standards Implementation reviewer determines the uses of the receiving waters, and the Assessment modeler establishes effluent limits that are protective of those uses. For this application, the unclassified receiving water uses are

minimal aquatic life use for the unnamed drainage ditch, the unnamed tributary of Walnut Creek, and Walnut Creek. The designated uses for Segment No. 1008 are primary contact recreation, public water supply, and high aquatic life use. Treated effluent discharged in accordance with the requirements of the draft permit is protective of surface water uses and, therefore, is protective of groundwater.

As specified in the TSWQS, water in the state must be maintained to preclude adverse toxic effects on aquatic life, terrestrial life, livestock, and domestic animals resulting from contact, consumption of aquatic organisms, consumption of water, or any combination of the three. In addition, water in the state must be maintained to preclude adverse toxic effects on human health resulting from contact recreation, consumption of aquatic organisms, consumption of drinking water, or any combination of the three. The draft permit has been designed to ensure that these quality standards would be maintained which will protect the groundwater and protect against aquifer contamination.

Comment 16:

Save Our Springs Alliance provided comments expressing concerns about the draft permit negatively affecting businesses.

Response 16:

The water quality permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters. The TCEQ does not have jurisdiction under the Texas Water Code or its regulations to address or consider property values or the marketability of adjacent property when determining whether to approve or deny a permit application. Additionally, the TCEQ does not have the authority to address concerns about the impact of the facility on the economy, businesses, tourism, or the resale of homes as part of the wastewater permitting process. The scope of the TCEQ's regulatory jurisdiction does not affect or limit the ability of a landowner to seek relief from a court in response to activities that interfere with landowner's use and enjoyment of his property.

Comment 17:

Greater Edwards Aquifer Alliance provided comments expressing concerns about lack of transparency and stated that the application was not available for public viewing.

Response 17:

Notice provisions for Applicants and the TCEQ are found in 30 TAC Chapter 39 (Public Notice). When the ED determines that an application is administratively complete, the Chief Clerk mails this determination, along with a Notice of Receipt of Application and Intent to Obtain Permit (NORI), to the Applicant.⁸ Not later than 30 days after the ED determines that the application is administratively complete, the Applicant must publish the NORI in the newspaper that has the largest circulation within the county or municipality in which the facility is located.⁹ The Applicant must also make a copy of the administratively complete application available for public viewing in the county in which the facility is located.¹⁰ Finally, the Applicant, using county deed records, must identify all landowners adjacent to the proposed facility and discharge and submit the list to the

⁸ 30 TAC § 39.418(a).

⁹ 30 TAC § 39.405(f).

¹⁰ 30 TAC § 39.405(g).

TCEQ Chief Clerk's office so it can mail timely copies of the public notices for the application to the adjacent landowners.

After completing the technical review of an application, the ED files the preliminary determination and the proposed permit with the Chief Clerk.¹¹ The Chief Clerk must mail the preliminary decision, along with the Notice of Application and Preliminary Decision (NAPD), to the Applicant, who must then publish the NAPD in the same newspaper as the NORI.¹² The Chief Clerk must also mail the NAPD to adjacent landowners and to persons who have filed public comment or hearing requests.¹³

The NAPD must set a deadline for filing public comments with the Chief Clerk that is no earlier than 30 days after its publication in a newspaper.¹⁴ As the public comment period has ended, the ED must file this Response to Public Comments, addressing all timely, relevant, and material, or significant public comments submitted during the comment period, regardless of whether the comments were withdrawn.¹⁵

In this case, the TCEQ received the application on October 19, 2021, and declared it administratively complete on December 23, 2021. The Applicant published the Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) in English in the *San Antonio Express-News* on June 16, 2022, and in Spanish in *La Voz Newspaper* on July 6, 2022. The ED completed the technical review of the application on April 15, 2022, and prepared the proposed draft permit, which if approved, establishes the conditions under which the Diamante Ranch facility must operate. The Applicant published the Notice of Application and Preliminary Decision (NAPD) in *New Braunfels Herald-Zeitung* newspaper in English on December 23, 2022, and in Spanish in *New Braunfels Herald-Zeitung* newspaper on December 23, 2022. A public meeting was held on January 26, 2023. The public comment period ended on January 26, 2023.

The Copies of the NORI and NAPD were mailed out to each person on the landowners list. Additionally, a copy of the permit application (including location maps) and the NAPD notice with a URL link to the TCEQ on-line location map (showing the location of the facility) are available for viewing and copying at the TCEQ's main office in Austin, 12100 Park 35 Circle, Building F, 1st Floor (Office of the Chief Clerk). The Applicant states that the permit application has been available for viewing and copying at Mammen Family Public Library, 131 Bulverde Crossing, Bulverde, Texas since publication of the NORI. The final permit application, proposed permit, statement of basis/technical summary, and the ED's preliminary decision are now available for viewing and copying at the same location since publication of the Combined NORI-NAPD. Additionally, during regular business hours, the public may review or copy the public file for this application, which includes the application, its attachments, the comment letters, this Response to Public Comment, and any other communications made during the review of this application, at TCEQ's Office of the Chief Clerk.

Comment 18:

David Wallace recommended denying application.

¹¹ 30 TAC § 39.419(a).

¹² 30 TAC § 39.419(b).

¹³ 30 TAC § 39.413.

¹⁴ 30 TAC § 39.551(c)(3).

¹⁵ 30 TAC § 55.156.

Response 18:

The ED acknowledges the comment.

Comment 19:

David Wallace provided comments expressing concerns about whether members of the public will be notified of malfunctions at the WWTP.

Response 19:

The draft permit contains multiple requirements related to preventing unauthorized discharges at the proposed facility. For example, Permit Condition No. 2.g prohibits unauthorized discharges, Operational Requirement No. 1 requires the permittee to properly operate and maintain the facility at all times, and Operational Requirement No. 4 requires the permittee to install safeguards that will prevent the discharge of untreated wastewater during a power failure. Under Monitoring and Reporting Requirement No. 1, the Applicant must submit their effluent test results to TCEQ each month. If an unauthorized discharge that endangers human health or the environment occurs, the Applicant is required to report it to TCEQ within 24 hours under Monitoring and Reporting Requirement No. 7. This must be followed up by a written report within five working days that includes a description of the potential danger to human health and the environment, the timeframe for when the problem will be corrected, and the steps the Applicant will take to mitigate any damage and prevent this type of problem from reoccurring. Failure to comply with TCEQ rules or the permit may subject the Applicant to enforcement action.

TCEQ's Office of Compliance and Enforcement ensures ongoing compliance with applicable state and federal regulations. As part of that responsibility, the Region 13 Office is required to conduct a mandatory comprehensive compliance investigation at minor facilities (facilities with a permitted flow of less than 1.0 MGD) once every five fiscal years. Additional mandatory investigations can be required if the facility is considered to be in significant noncompliance with its permit, which is determined by TCEQ's Compliance Monitoring Section and is based on self-reported effluent violations. If citizens observe any unauthorized discharges or other permit violations, the violations can be reported to the Region 13 Office at 210-490-3096. If the proposed facility is found to be out of compliance with the draft permit, the Applicant may be subject to enforcement action. Records relating to the facility are public record and may be accessed at TCEQ's main office at 12100 Park 35 Circle in Austin.

Furthermore, 30 TAC Chapter 319 outlines specific instances in which facility owners are required to notify members of the public in the event of unauthorized discharges as well as sanitary sewer overflows. Under 30 TAC § 319.302(b), the owner of a facility, through its responsible individual, must notify appropriate local government officials and the local media for spills regardless of volume, that the facility owner knows or has reason to know will adversely affect a public or private source of drinking water.

CHANGES MADE TO THE PERMIT IN RESPONSE TO COMMENT

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

Respectfully submitted,

Texas Commission on Environmental Quality

Erin Chancellor, Interim Executive Director

Guy Henry, Acting Deputy Director
Environmental Law Division



Harrison Cole Malley

Staff Attorney

Environmental Law Division

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REPRESENTING THE EXECUTIVE DIRECTOR

OF THE TEXAS COMMISSION ON

ENVIRONMENTAL QUALITY

CERTIFICATE OF SERVICE

I certify that on June 8, 2023, the Executive Director's Response to Public Comment for Permit No. WQ0016060001 was filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk.



Harrison Cole Malley, *Staff Attorney*
State Bar No. 24116710