Jon Niermann, Chairman Emily Lindley, Commissioner Bobby Janecka, Commissioner Toby Baker, Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 12, 2022

TO: Persons on the attached mailing list.

RE: Rattler Ridge, LLC

TPDES Permit No. WQ0016049001

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any action is taken on this application unless all requests for contested case hearing or reconsideration have been withdrawn before that meeting.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 is a copy of the Executive Director's Response to Comments. A copy of the complete application, draft permit and related documents, including public comments, is available for review at the TCEQ Central Office. A copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at the Seguin Public Library, 313 West Nolte Street, Seguin, 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.

Laurie Gharis

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/mt

Enclosure

MAILING LIST for Rattler Ridge, LLC

TPDES Permit No. WQ0016049001

FOR THE APPLICANT

Clint Jones, President Rattler Ridge, LLC 1067 Farm-to-Market Road 306, Suite 106 New Braunfels, Texas 78130

Daniel Ryan, P.E., Vice President LJA Engineering 7500 Rialto Boulevard Building II, Suite 100 Austin, Texas 78735

Lauren Crone, P.E., Project Manager LJA Engineering 7500 Rialto Boulevard Building II, Suite 100 Austin, Texas 78735

INTERESTED PERSON(S)

See attached list.

<u>FOR THE EXECUTIVE DIRECTOR</u> via electronic mail:

Ryan Vise, Deputy Director Texas Commission on Environmental Quality External Relations Division Public Education Program MC-108 P.O. Box 13087 Austin, Texas 78711-3087

Michael T. Parr, II, Staff Attorney Texas Commission on Environmental Quality Environmental Law Division MC-173 P.O. Box 13087 Austin, Texas 78711-3087 Jose Alfonso Martinez, Technical Staff Texas Commission on Environmental Quality Water Quality Division MC-148 P.O. Box 13087 Austin, Texas 78711-3087

FOR PUBLIC INTEREST COUNSEL via electronic mail:

Vic McWherter, Attorney
Texas Commission on Environmental
Quality
Public Interest Counsel MC-103
P.O. Box 13087
Austin, Texas 78711-3087

FOR THE CHIEF CLERK via electronic mail:

Laurie Gharis, Chief Clerk Texas Commission on Environmental Quality Office of Chief Clerk MC-105 P.O. Box 13087 Austin, Texas 78711-3087 ENGELKE , DREW 101 E COURT ST SEGUIN TX 78155-5729 POWERS III , GARLAND 2741 FM 1979 SAN MARCOS TX 78666-2103 RODRIGUEZ JR , ARTURO D ATTORNEY RUSSELL RODRIGUEZ HYDE BULLOCK LLP BLDG 2 STE 200 1633 WILLIAMS DR GEORGETOWN TX 78628-3659

URBAN , BETTYE JEAN 745 LAUBACH RD SEGUIN TX 78155-0117

TPDES PERMIT NO. WQ0016049001

| APPLICATION BY | § | BEFORE THE |
|-------------------------|---|----------------------------|
| RATTLER RIDGE, LLC FOR | § | TEXAS COMMISSION ON |
| NEW TPDES PERMIT | § | ENVIRONMENTAL |
| NO. WQ0016049001 | § | QUALITY |

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director (ED) of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comment (Response) on the application by Rattler Ridge, LLC (Applicant) for new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016049001 (proposed permit), 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 York Creek Improvement District (the District), Guadalupe County Commissioner-Precinct 2, Drew Engelke, the City of San Marcos (the City), and Garland Powers III. This response addresses all timely public comments received, whether withdrawn or not. 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 on the TCEQ web site at http://www.tceq.texas.gov.

BACKGROUND

The Applicant applied for the proposed permit, which authorizes the discharge of treated domestic wastewater at a daily average flow not to exceed 100,000 or 0.1 Million Gallons per Day (MGD) in the Interim I phase, at a daily average flow not to exceed 0.20 MGD in the Interim II phase, and at a daily average flow not to exceed 0.40 MGD in the Final phase.

Description of Facility and Receiving Streams

If this permit is ultimately issued, the Rattler Ridge Wastewater Treatment Facility (proposed facility) will serve the Rattler Ridge subdivision and will be located approximately 7,656 feet southeast of the intersection of Farm-to-Market Road 1978 and State Highway 123, in Guadalupe County, Texas 78666.

When constructed, the proposed facility will be an activated sludge process plant operated in the extended aeration mode. Treatment units common across all phases, include a bar screen and tertiary filters. Treatment units specific to the Interim I phase include an aeration basin, a final clarifier, an aerobic sludge digester, and a chlorine contact chamber. Treatment units specific to the Interim II phase include a flow splitter, two aeration basins, two final clarifiers, two aerobic sludge digesters, and two chlorine contact chambers. Treatment units specific to the Final phase include a flow splitter, three aeration basins, three final clarifiers, three aerobic sludge digesters, and three chlorine contact chambers.

The treated effluent will be discharged to an onsite pond where it will continue to an unnamed tributary, then to Long Creek, then to an unnamed impoundment, then back to Long Creek, then to York Creek, and finally to the Lower San Marcos River in Segment No. 1808 of the Guadalupe River Basin.

Because the discharge is directly to an unclassified water body, this permitting action was reviewed in conformity with the 2018 Texas Surface Water Quality Standards (TSWQS) (30 TAC §§ 307.4(h) and (l)) and the TCEQ's *Procedures to Implement the Texas Surface Water Quality Standards-June 2010* (TCEQ IPs). 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's impact has been performed and the corresponding Dissolved Oxygen (DO) criterion assigned as stipulated in the TSWQS (30 TAC § 307.5) and the TCEQ IPs.

The unclassified receiving water uses are limited aquatic life use for the onsite pond, the unnamed tributary, and Long Creek (all 3.0 mg/L DO), and high aquatic life use for the unnamed reservoir (5.0 mg/L DO). The designated uses for Segment No. 1808 are primary contact recreation, public water supply, and high aquatic life use. Segment No. 1808 is not currently listed on the state's inventory of impaired and threatened waters (the 2020 CWA § 303(d) list).

Based on the total phosphorus screening, a 0.5 mg/L total phosphorus (**TP**) limit is recommended for all phases of the permit to preclude eutrophication in the instream pools within the unnamed tributary and Long Creek as well as the unnamed reservoir.

In accordance with the TSWQS (30 TAC § 307.5), and the TCEQ IPs, an antidegradation review of the receiving waters was performed. The Tier 1 antidegradation review preliminarily determined that existing water quality uses will not be impaired by this permitting action and that numerical and narrative criteria to protect existing uses will be maintained. The Tier 2 review preliminarily determined that no significant degradation of water quality is expected in the unnamed reservoir, which has been identified as having high aquatic life use, and that existing uses will be maintained and protected. However, if new information is received, these determinations can be reexamined or modified.

Additionally, the water quality-related effluent limitations (limits) in the proposed permit will maintain and protect the existing instream uses, and for the conventional effluent parameters such as Minimum Dissolved Oxygen (DO), Five-day Carbonaceous Biochemical Oxygen Demand (CBOD₅). Total Suspended Solids (TSS), and Ammonia Nitrogen (NH₃-N), the limits 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. The effluent limits and conditions in the proposed permit meet requirements for secondary treatment and disinfection according to 30 TAC Chapter 309 (Subchapter A: Effluent Limits) and comply with the TSWOS (30 TAC §§ 307.1-.10, eff. 7/22/2010), and the United States Environmental Protection Agency (USEPA)-approved portions of the TSWQS (eff. 3/6/2014). In a case such as this, end-of-pipe compliance with pH limits between 6.0 and 9.0 standard units reasonably assures instream compliance with the TSWOS for pH when the discharge authorized is from a minor facility and the unclassified waterbodies have minimal or limited aquatic life uses. This technology-based approach reasonably assures instream compliance with TSWOS criteria due to the relatively smaller discharge volumes authorized by these permits. This conservative assumption is based on TCEQ sampling conducted throughout the state that indicates that instream buffering quickly restores pH levels to ambient conditions.

Based on water quality modeling results from an "uncalibrated QUAL-TX" model, for all effluent flow phases (0.10, 0.20, and 0.40 MGD) an effluent limit set of 10.0 mg/L CBOD_5 , 2.0 mg/L NH_3 -N, and 5.0 mg/L DO is predicted to ensure that DO

will be maintained above the criterion established by the Standards Implementation Team within the ED's Water Quality Division (WQD staff) for the unnamed tributary and the on-site pond (both 3.0 mg/L DO). 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.

Therefore, the entire set of water quality limits of the proposed permit, based on a 30-day average, are 10/15/2.0 mg/L, CBOD $_5$ /TSS/NH $_3$ -N, respectively, 0.5 mg/L TP, and a bacteria limit of 126 colony forming units (CFU) or most probable number (MPN) of *E. coli* per 100 ml. The proposed permit includes requirements that the Applicant use Chlorine for disinfection purposes. Specifically, the treated effluent must contain a total chlorine residual of at least 1.0 mg/l and must not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and must be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the ED.

The discharge authorized by the proposed permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic-dependent species or proposed species or their critical habitat, as no priority watershed of critical concern has been identified in Segment 1808. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization for the Texas Pollutant Discharge Elimination System (September 14, 1998, October 21, 1998 update). To make this determination for TPDES permits, TCEQ and EPA only consider aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species. This determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion.

Procedural Background

The TCEO received the application on October 1, 2021, and declared it administratively complete on December 2, 2021. The Applicant published the Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) in English in Guadalupe County, Texas in the San Marcos Daily Record on December 8, 2021, and in Spanish in El Mundo on December 9, 2021. The ED completed the technical review of the application on February 23, 2022, and prepared the proposed permit, which if approved, would establish the conditions under which the proposed facility must operate. The Applicant published the Notice of Application and Preliminary Decision (NAPD) in English in Guadalupe County, Texas in the San Marcos Daily Record on March 31, 2022, and in Spanish in *El Mundo* on March 31, 2022. The public comment period ended on May 2, 2022. 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.

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: <u>www.statutes.capitol.texas.gov;</u>
- TCEQ website: <u>www.tceq.texas.gov</u> (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 online at:
 https://www.tceq.texas.gov/assets/public/compliance/monops/complaints/complaints.html
 or by sending an email to the following address:
 cmplaint@TCEQ.state.tx.us.

Commission records for the Proposed facility are available for viewing and copying at TCEQ's main office in Austin, 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, ED's preliminary decision, and draft permit are available for viewing and copying at the Seguin Public Library located at 313 West Nolte Street, Seguin, Tx 78155. The final permit application, proposed permit, statement of basis/technical summary, and the ED's preliminary decision are now are available for viewing and copying at the same location since publication of the NAPD.

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 Proposed 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, TX at (210) 490-3096 or the statewide toll-free number at 1-888-777-3186 to address potential permit violations. In addition, complaints may be filed by sending an e-mail to cmplaint@tceq.texas.gov, or online at:

https://www.tceq.texas.gov/compliance/complaints (select "use our online form"). If an inspection by the Regional Office finds that the proposed facility is out of compliance, the proposed facility may be subject to enforcement actions.

COMMENTS AND RESPONSES

COMMENT 1:

Garland Powers III commented expressing concerns about flooding and erosion that will occur on his property. Mr. Powers questioned who will be paying for making repairs from washouts/erosion and removal of debris washed up on his property.

RESPONSE 1:

The ED encourages the participation of all individuals in the environmental permitting process. However, there are certain concerns of individuals that the TCEQ cannot address in the review of a wastewater discharge permit, as the scope of the ED's jurisdiction in a TPDES application is limited to the issues set out by statute. While the Texas Legislature has given the TCEQ the responsibility to protect water quality and section 26.027 of the Texas Water Code (TWC) authorizes the TCEQ to

issue permits to control the discharge of wastes or pollutants into state waters and to protect the water quality of the state's rivers, lakes and coastal waters, the ED through his Water Quality Division (WQD) has no jurisdiction to address flooding or erosion issues in the wastewater permitting process, which is limited to controlling the discharge of pollutants into waters in the state and protecting the water quality of the state's waterbodies.

While the TCEQ does not have jurisdiction to regulate flooding in the context of a wastewater discharge permit, to the extent that a concern over flooding also involves water quality, the Applicant is always required to comply with all the numeric and narrative effluent limitations and other conditions in the proposed permit, including during flooding conditions. Likewise, the proposed permit includes effluent limits and other requirements that the Applicant must meet even during rainfall events and periods of flooding. According to the application, the proposed facility will be located above the 100-year flood plain. For additional protection, the proposed permit includes Other Requirement No. 4, which requires the Applicant to provide protection for the facility from a 100-year flood.

For any flooding concerns, members of the public may wish to contact the Guadalupe County Floodplain Manager's Office, run out of the Guadalupe County Environmental Health Department at (830) 303-8858 7:00 a.m. – 4:00 p.m., Monday through Friday. The TCEQ Resource Protection Team can be contacted for aid in identifying and contacting the appropriate county officials or offices, by calling (830) 303-4691. Additionally, the Federal Emergency Management Agency has programs designed to mitigate damage caused by flooding.

Finally, the issuance of a permit by the TCEQ does not authorize any injury to persons or property or an invasion of others property rights. In addition, the scope of TCEQ's regulatory jurisdiction does not, nor does the proposed permit, limit the ability of nearby landowners to seek relief from a court or use common law remedies in response to trespass, nuisance, other causes of action in response to activities that may or do interfere with the use and enjoyment of their property, or that may or do result in injury or adverse effects on human health or welfare, animal life, vegetation, or property. If the Applicant's activities create any nuisance conditions, the TCEQ may be contacted to investigate whether a permit violation has occurred.

COMMENT 2:

The District commented questioning what the projected volume of discharge would likely be flowing into "Site 10," a dam owned by the District with the in-flow of the dam facing FM 1979 and located just off Dreibrodt Road at the frontage of the dam.

RESPONSE 2:

The ED's review of the permit application did not include assessments of flows downstream of the outfall. However, the proposed permit authorizes a discharge of a design flow of 0.4 MGD and a 2-hr peak flow of 1.6 MGD of treated effluent from the proposed facility.

COMMENT 3:

The District commented, requesting that it be added to the list of vested persons concerned about the safety and operation of Site 10 and other watershed sites within the district.

RESPONSE 3:

Any person, including entities, can be added as an "Interested Person" to a specific permit application to provide comments and/or to be placed on the mailing list. Interested Persons and entities are able to provide eComments through the TCEQ website, or by mailing a letter to TCEQ-Office of the Chief Clerk, MC 105, P.O. Box 13087, Austin, Texas 78711-3087.

COMMENT 4:

Guadalupe County Commissioner Engelke commented opposing the issuance of the proposed permit and expressing concern about the negative environmental impacts for the area and the watersheds affected by the discharge.

The City commented expressing concern about whether the proposed permit is protective of water quality and whether the water quality parameters of the permit are adequate to ensure that existing uses will not be impaired, as well if fish, livestock, wildlife and other environmental receptors will be adversely affected and whether the health of persons on nearby property will be affected.

Garland Powers III commented expressing concern about negative impacts on his livestock that drink and frequently get into a pond located along Long Creek and his family's ability to enjoy outdoor recreational activities such as fishing canoeing, swimming, duck hunting.

RESPONSE 4:

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

Similarly, the TCEQ oversees the protection of water quality with federal regulatory authority, such as the TPDES program, over discharges of pollutants into Texas surface waterbodies. The TCEQ has legislative authority to protect water quality in Texas and under TWC, Chapter 26, to authorize TPDES discharge permits subject to the regulations in 30 TAC Chapters 305, 307, 309, including specific rules for wastewater treatment systems under Chapters 217 and 309.

Staff in the ED's Water Quality Division (WQD staff) evaluated the application as an authorization to discharge treated wastewater into water in the State. Thus, the quality of the effluent and the method of achieving that quality must follow the TWC, the Federal Clean Water Act, and the TSWQS.

Chapter 26 of the TWC and TCEQ rules relating to water quality are geared towards 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.¹

Likewise, the TPDES program mandates that discharges of treated effluent into water in the state from facilities regulated by TPDES permits must meet the requirements of the TSWQS. The TSWQS is a primary mechanism for the TCEQ to protect surface water quality, groundwater quality, human health, aquatic life, the environment, and designated uses of the receiving waters. Development of the proposed permit was in accord with the TSWQS (30 TAC Chapter 307) to be protective of water quality, provided that the Applicant operates and maintains the proposed facility according to TCEQ rules and the proposed permit's requirements.

The TSWQS require that discharges may not cause surface waters to be toxic to aquatic life, terrestrial wildlife, livestock, or domestic animals, may not degrade receiving waters, and may not result in situations that impair existing, attainable, or designated uses. The effluent limits in the proposed permit are set to maintain and protect the receiving water's existing uses of primary contact recreation, public water supply, and high aquatic life use.

As specified in the methodologies outlined in 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. 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 to ensure these quality standards would be supported.

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

As part of the technical review within the application process, WQD Staff reviews all applications in accordance with the TSWQS. Staff from the Standards Implementation Team must determine the uses of the receiving waters, and the ED's staff in the Water Quality Assessment section must set effluent limits that are protective of those uses. To achieve the goal of maintaining a level of water quality sufficient to protect existing uses, the proposed permit contains several water quality specific parameters that limit the potential impact of the discharge on the receiving waters, such as the effluent limits in the proposed permit, which the ED's staff developed to maintain and protect the existing in-stream uses.

Additionally, staff in the ED's Water Quality Assessment section developed protective effluent limits by performing Dissolved Oxygen or DO modeling analyses. DO concentrations in a waterbody are critical for the waterbody's health and

¹ Texas Water Code § 26.003 and 30 TAC § 307.1.

protection of aquatic life. To evaluate the potential DO impact of the proposed discharge under the most conservative conditions, the ED's staff incorporates what are known as critical conditions into DO modeling analyses. In many cases, effluent discharges decrease DO levels in waterbodies; and to ensure that discharges do not lower DO levels below the criteria, DO modeling analyses are performed to evaluate whether the effluent limits in a discharge permit are predicted to be adequate to ensure the DO concentrations in the waterbodies of a discharge route will be maintained above the criteria established for those water bodies by the Standards Implementation Team.

DO modeling was performed during the technical review for the proposed facility. Based on the model results, the effluent set in the proposed permit in the Interim and Final phases, based on a 30-day average, are 10 mg/l BOD_5 , 15 mg/l TSS, 2.0 mg/l NH_3 -N, 126 colony forming units or most probable number of *E. coli* per 100 ml; and the effluent must contain a minimum DO of 5.0 mg/l and must be monitored once per week by grab sample. The effluent must be free of visible oil and, other than in trace amounts, floating solids or visible foam. The effluent's pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored once per day by grab sample. In a case such as this, end-of-pipe compliance with pH limits between 6.0 and 9.0 standard units reasonably assures instream compliance with the TSWQS for pH when the discharge authorized is from a minor facility. This conservative assumption is based on TCEQ sampling conducted throughout the state that indicates that instream buffering quickly restores pH levels to ambient conditions.

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. 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.

For the proposed facility, the Applicant has chosen chlorine disinfection. Chlorination may be via gaseous, liquid, or tablet forms. 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.² The effluent from the proposed facility, disinfected with chlorine, must contain a chlorine residual of at least 1.0 mg/l and the permit limit for maximum total chlorine residual is 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and must be monitored five times per week by grab sample.³

Also protecting the water quality of the creeks and waterbodies of the discharge route is the aquatic life uses assigned, which governs what uses and criteria will apply to protect Segment No. 1808 of the Guadalupe River Basin and the creeks upstream of Segment No. 1808, their uses and the aquatic life that dwell in them, as well as consumption by terrestrial wildlife. The proposed facility is a minor municipal facility

Executive Director's Response to Public Comment, TPDES Permit No. WQ0016049001

² U.S. EPA Wastewater Technology Fact Sheet- Chlorine Disinfection (EPA 832-F-99-062)

³ Rattler Ridge Draft Permit, Effluent Limitations and Monitoring Requirements, page 2; *see also* 30 Tex. ADMIN. CODE § 309.3(g)(2)

that will discharge to an onsite pond, unnamed tributary, Long Creek, and York, all of which is unclassified and has a "limited aquatic life" use. However, the discharge also enters the unnamed reservoir and Segment No. 1808, both of which have a "high aquatic life" use; and waterbodies that support an exceptional and high aquatic life uses have associated criteria that protect the aquatic life that live in the waterbodies as well as terrestrial wildlife that use the waterbodies as a source of water or food. Additionally, Minor municipal facilities typically do not have industrial contributors, and therefore, do not have toxins in their effluent. The proposed facility's discharge will have to meet a high DO criterion to support an aquatic community with exceptional and high-existing aquatic life uses.

WQD staff developed and designed the proposed permit to be protective of the uses of all water bodies that could be potentially affected by the proposed discharge. In addition, the discharge cannot cause significant degradation of water quality in any water bodies that exceed fishable/swimmable quality, such as Segment No. 1808 and Wilbarger Creek. Fishable/swimmable waters are defined as waters that have quality sufficient to support propagation of indigenous fish, shellfish, terrestrial life, and recreation in or on the water. To achieve the goal of supporting a level of water quality sufficient to protect existing water body uses, the proposed permit contains several water quality specific parameter requirements that limit the potential impact of the discharge on the receiving waters. It is the mission of WQD staff to provide appropriate effluent limitations to protect the uses of the receiving waterbody.

Because Waters 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 WQD Staff determined that the proposed permit includes provisions to ensure that the TSWQS will be maintained, which ensures that the effluent discharged is protective of aquatic life, human health, and the environment.

Furthermore, conventional domestic sewage does not typically contain toxic compounds in measurable quantities that might result in toxic effects in the receiving waterbodies, unless there are significant industrial users contributing to the waste stream. However, 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 Applicant.

COMMENT 5:

The City commented, questioning whether impacts on groundwater have been adequately addressed in the proposed permit.

RESPONSE 5:

The legislature has determined that "the goal of groundwater policy in this state is that the existing quality of groundwater not be degraded. This goal of non-degradation does not mean zero-contaminant discharge." Chapter 26 of the Texas Water Code further states, "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." 5

⁴ Texas Water Code § 26.401(b)

⁵ Texas Water Code § 26.401(c)(2)

The Water Quality Division has determined that the proposed permit was drafted in accordance with the TSWQS, which ensures that the effluent discharge is protective of aquatic life, human health, and the environment. The review process for surface water quality is conducted by the Standards Implementation Team and Water Quality Assessment Team surface water modelers. The Water Quality Division has determined that if the surface water quality is protected, then the groundwater quality in the vicinity will not be impacted by the discharge. Therefore, the permit limits given in the draft permit intended to maintain the existing uses of the surface waters and preclude degradation will also protect groundwater.

Further, 30 TAC § 309.13(c) states that a wastewater treatment plant unit may not be located closer than 500 feet from a public water well nor 250 feet from a private water well. Public water supply systems in Texas are regulated by the TCEQ's Water Supply Division. Please contact the Water Supply Division at 512-239-4691 for more information.

COMMENT 6:

The City commented, questioning whether the proposed design of the proposed facility is adequate to ensure that the required level of effluent will be achieved.

RESPONSE 6:

The proposed treatment process will be an activated sludge process plant operated in the extended aeration mode. The facility will be constructed in three phases and treatment units will include a bar screen, aeration basins, final clarifiers, aerobic digesters, and chlorine contact chambers. In addition, each phase will include tertiary filters. The TCEQ design criteria for a domestic wastewater system under 30 TAC Chapter 217 identify types of treatment technology that can achieve the treatment levels required in the proposed permit.

Other Requirement No. 6 in the proposed permit requires Rattler Ridge, LLC to submit a summary transmittal letter in accordance with the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee must submit plans and specifications and a final engineering design report which comply with 30 TAC Chapter 217, relating to "Design Criteria for Domestic Wastewater Systems." The permittee must clearly show how the treatment system will meet the permitted effluent limitations required on Pages 2, 2a, and 2b of the draft permit. The ED's staff will ensure that the plant design can adequately treat the domestic wastewater in accordance with the effluent limits in the proposed permit during the review of the plans and specifications for the proposed facility.

COMMENT 7:

The City commented, questioning whether the proposed facility will create nuisance odor conditions.

RESPONSE 7:

To control and abate odors the TCEQ rules require facilities, such as the proposed facility, to meet buffer zone requirements for the abatement and control of nuisance odor according to 30 TAC § 309.13(e), which provides three options for applicants to satisfy the nuisance odor abatement and control requirements. Rattler

⁶ Rattler Ridge LLC Draft Permit, Other Requirements, Item 6, page 34

Ridge LLC can comply with the rule by: 1) ownership of the buffer zone area; 2) restrictive easement from the adjacent property owners for any part of the buffer zone not owned by Rattler Ridge LLC; or 3) providing nuisance odor control.⁷

According to its application, Rattler Ridge LLC intends to comply with the requirement to abate and control nuisance of odor by locating the treatment units at least 150 feet from the nearest property line.⁸ This requirement is incorporated in the draft permit.⁹ Therefore, 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.

Further, Rattler Ridge LLC proposes in its application that the Rattler Ridge WWTP will be an activated sludge process plant operated in the extended aeration mode. The activated sludge process is the most frequently used biological wastewater treatment process for treating domestic wastewater, and the use of the extended aeration variation has been known to produce highly treated effluent with low biosolids production. When properly treated by the proposed wastewater treatment process, the effluent is not expected to have an offensive odor.

If anyone experiences nuisance odor conditions or any other suspected incidents of noncompliance with the permit or TCEQ rules, they may be reported to the TCEQ Regional Office (Region 13) in San Antonio, TX at (210) 490-3096 or the statewide toll-free number at 1-888-777-3186 to address potential permit violations. In addition, complaints may be filed by sending an e-mail to cmplaint@tceq.texas.gov, or online at: https://www.tceq.texas.gov/compliance/complaints (select "use our online form").

Moreover, the permit does not limit the ability of an individual to seek legal remedies against Rattler Ridge LLC 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 may interfere with the normal use and enjoyment of property.

COMMENT 8:

The City commented, questioning whether the Applicant is qualified to operate the proposed facility.

RESPONSE 9:

The TCEQ issues permits that describe the conditions under which the proposed facility must operate. All facilities must be designed, operated, and maintained consistent with applicable TCEQ rules. These provisions require that a facility is properly operated and maintained at all times. Specifically, Other Requirement No.1 of the proposed permit requires this Applicant to 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.

The proposed facility, a Category C facility, must be operated by a chief operator or an operator holding a Class C license or higher. The proposed facility must

⁷ 30 Tex. Admin. Code § 309.13(e).

⁸ Rattler Ridge, LLC Permit Application, Administrative Report, 1.1, Item No. 2(b), page 2.

⁹ Rattler Ridge, LLC Draft Permit, Other Requirements, Item No. 3, page 34.

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 proposed 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 Category C.

The TCEQ's Office of Compliance and Enforcement ensures compliance with applicable state and federal regulations. The Region 13 office is required to conduct a mandatory comprehensive compliance investigation (CCI) at minor facilities (facilities with permitted flow less than 1 million gpd) once every five fiscal years. Additional mandatory investigations can be required if the facility is categorized as significant noncompliance (SNC), which is determined by the Compliance Monitoring Section of the TCEQ and is based on self-reported effluent violations.

If the proposed facility or the Applicant is found to be out of compliance with the terms or conditions of the proposed permit, the Applicant may be subject to enforcement. If anyone experiences any suspected incidents of noncompliance with the permit or TCEQ rules, they may be reported to the TCEQ Regional Office (Region 13) in San Antonio, TX at (210) 490-3096 or the statewide toll-free number at 1-888-777-3186 to address potential permit violations. In addition, complaints may be filed by sending an e-mail to cmplaint@tceq.texas.gov, or online at: https://www.tceq.texas.gov/compliance/complaints (select "use our online form").

COMMENT 10:

The City commented, questioning whether the Applicant's compliance history raises issues regarding the ability to comply with the permit.

RESPONSE 10:

During the technical review of the application, the TCEQ reviewed Rattler Ridge's compliance history according to the rules in 30 TAC Chapter 60. The compliance history is reviewed for the company and site for the five-year period prior to the date the permit application was received by the Executive Director. The compliance history includes multimedia compliance-related components about the site under review. These components include the following: enforcement orders, consent decrees, court judgments, criminal convictions, chronic excessive emissions events, investigations, notices of violations, audits and violations disclosed under the Audit Act, environmental management systems, voluntary on-site compliance assessments, voluntary pollution reduction programs and early compliance.

This permit application was received after September 1, 2002, and the company and site have been rated and classified pursuant to 30 TAC Chapter 60. A company and site may have one of the following classifications and ratings:

- 1. a *high performer classification*, has a rating of fewer than 0.10 points and is considered to have an above-satisfactory compliance record;
- 2. a *satisfactory performer classification*, has a rating between 0.10 points to 55 points and is considered to generally comply with environmental regulations; or

3. an *unsatisfactory performer classification*, has a rating above 55 points and is considered to perform below minimal acceptable performance standards established by the commission.¹⁰

This site has a rating of N/A and a classification of NOT APPLICABLE because this is a new site. The company rating and classification, which is the average of the ratings for all sites the company owns, is also N/A and NOT APPLICABLE.

COMMENT 11:

The City commented, questioning whether the proposed facility violates the TCEQ's regionalization policy and if the permit complies with TWC § 26.0282.

RESPONSE 11:

TWC § 26.081 enumerates the state's regionalization policy. Section 26.081 states that the policy should "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." In furtherance of that policy TWC § 26.0282 authorizes the TCEQ, when considering the issuance of a permit to discharge waste, to deny or alter the terms and conditions of a proposed permit based on need and the availability of existing or proposed area-wide or regional waste collection, treatment, and disposal systems.

Domestic Technical Report 1.1 of the application requires information concerning regionalization of wastewater treatment plants. Applicants requesting a new permit or certain major amendments are required to review a three-mile area surrounding the proposed facility to determine if there is a wastewater treatment plant or sewer collection lines within the area that the permittee can utilize. Applicants are required to contact those facilities to inquire if they currently have the capacity or are willing to expand to accept the volume of wastewater proposed. If an existing wastewater facility does have the capacity and is willing to accept the proposed wastewater, the applicant must submit an analysis of expenditures required to connect to a permitted wastewater treatment facility or collection system located within three miles versus the cost of the proposed facility or expansion. Finally, applicants are required to provide copies of all correspondence with the owners of existing plants within three miles of the proposed plant regarding regionalization with their system.

The City has a collection system within a three-mile radius of the proposed facility site location. The Applicant demonstrated that connecting to an existing wastewater collection system would be cost prohibitive compared to the proposed facility.

COMMENT 12:

The City commented, questioning whether the application provides truthful information upon which the TCEQ can rely.

¹⁰ 30 Tex. Admin. Code § 60. 2 (Compliance History Classification).

¹¹ Domestic Technical Report 1.1 (TCEQ Form 10054), Section 1, Item B, page 21

RESPONSE 12:

The ED conducted both an administrative and a technical review of the application according to the Water Quality Division procedures. The application was determined administratively complete on December 2, 2021. The technical review was completed on February 23, 2022, when appendix I, design flows for each of the three phases, and appendix J, Sludge Management Plan were resubmitted. In addition, on November 30, 2021, the application was updated with a letter to TCEQ providing a copy of a service request letter, service request email response, and a cost analysis.

During its review of permit applications, the ED relies on the representations made in the application. Permit applicants are required to certify the accuracy of the information submitted and the application must be signed by a responsible party under penalty of law.

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

Toby Baker, Executive Director

Charmaine Backens, Deputy Director Environmental Law Division

Michael T. Parr II, Staff Attorney Environmental Law Division State Bar No. 24062936 P.O. Box 13087, MC 173 Austin, Texas 78711 3087

Telephone No. 512-239 0611 Facsimile No. 512-239-0626

REPRESENTING THE EXECUTIVE DIRECTOR OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CERTIFICATE OF SERVICE

I certify that on June 29, 2022, the Executive Director's Response to Public Comment for Permit No. WQ0016049001 was filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk.

Michael T. Parr II, *Staff Attorney* Environmental Law Division

State Bar No. 24062936