



January 12, 2023

TCEQ Commissioners
12100 Park 35 Circle
Room 201S of Building E
Austin, Texas, 78753

**RE: Response to Requests for Hearing from Shalania Walker and Dana Garret
Docket No. 2022-1700-MWD Permit No. WQ0016107001.
Filed by Kimley Horn Engineering on Behalf of Applicant PHAU-Lockhart 450, LCC.**

Dear TCEQ commissioners,

We ask that you deny the aforementioned requests for public hearing, as they have already been addressed by TCEQ in the attached Decision of the Executive Director.

The concerns listed in Shalania Walker's Hearing Request were addressed in Responses 1, 2, 4, 5, and 6, and no changes to the permit were recommended by the Executive Director as a result.

The concerns listed in Dana Garret's Hearing Request were addressed in Response 3 in the attached decision letter, and no changes to the permit were recommended by the Executive Director as a result.

Concerns raised by GBRA about proposed permit effluent limits were addressed in Response 3 and the Executive Director found that "the proposed effluent limits of 10 mg/l CBOD5, 3 mg/L NH3-N, and 4.0 mg/L dissolved oxygen were predicted to be adequate to maintain the numeric criteria for dissolved oxygen levels of 5.0 mg/L for Clear Fork of Plum Creek as stipulated in the Texas Surface Water Quality Standard's (TSWQS) 30 TAC Chapter 307. The increased level of effluent treatment for WWTFs suggested by the Plum Creek WPP is voluntary and non-regulatory, and the effluent limitations in the proposed permit are based on and consistent with TCEQ modeling procedures."

However, in the interest of environmental stewardship, the Applicant agreed to the stricter effluent limits proposed by GBRA, despite their voluntary and non-regulatory nature, demonstrating the Applicants willingness to go beyond the limits of necessity to protect water quality and environmental health. These stricter limits are as follows: limits of 5 mg/l CBOD5, 5 mg/L TSS, 2 mg/L NH3-N, 0.5 Total Phosphorus, and 4.0 mg/L dissolved oxygen. Attached are the effluent limit pages showing the stricter limits agreed to by the Applicant, which was included in the latest revision of the draft permit.

For these reasons, we request that the TCEQ commissioners deny the requests for public hearing referenced above and move to approve the permit.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.
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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 30, 2022

TO: All interested persons.

RE: Phau-Lockhart 450, LLC
TPDES Permit No. WQ0016107001

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 Dr. Eugene Clark Library, 217 South Main Street, Lockhart, 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

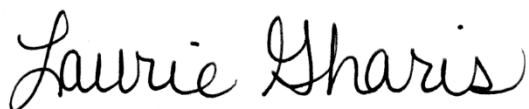
Processing of Requests.

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
Phau-Lockhart 450, LLC
TPDES Permit No. WQ0016107001**

The Executive Director has made the Response to Public Comment (RTC) for the application by Phau-Lockhart 450, LLC for TPDES Permit No. WQ0016107001 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 (WQ0016107001) 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, 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 Dr. Eugene Clark Library, 217 South Main Street, Lockhart, Texas.

MAILING LIST
for
Phau-Lockhart 450, LLC
TPDES Permit No. WQ0016107001

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INTERESTED PERSONS:

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Courtney Kerr-Moore
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Shalaina Walker
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FOR THE EXECUTIVE DIRECTOR
via electronic mail:

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TPDES PERMIT NO. WQ0016107001

APPLICATION BY	§	BEFORE THE
PHAU-LOCKHART 450, LLC FOR NEW	§	TEXAS COMMISSION ON
TPDES PERMIT NO. WQ0016107001	§	ENVIRONMENTAL QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director (ED) of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comment (Response) on the application by Phau-Lockhart 450, LLC (Applicant) for new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016107001, 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 Dana Garrett, Shalaina Walker, and the Guadalupe-Blanco River Authority (GBRA). 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 TPDES Permit No. WQ0016107001 (**proposed permit**), which authorizes the discharge of treated domestic wastewater at a daily average flow limit of 125,000 or 0.125 million gallons per day (**MGD**) in the Interim Phase I, at a daily average flow limit of 0.25 MGD in the Interim Phase II, and a Final Phase flow limit of 0.499 MGD from the Clear Fork Ranch Wastewater Treatment Facility (**proposed facility**). The proposed permit authorizes sludge generated at the proposed facility to be disposed of at any TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

Description of Facility

If this permit is ultimately issued, the proposed facility will be located approximately 0.75 miles southeast of the intersection of Clark Loop and State Highway 142, in Caldwell County, Texas 77845, serve the Clear Fork Ranch Development, and will be an activated sludge process plant, operated in the conventional mode. Treatment units in the Interim I phase will include a headworks screen, an aeration basin, a final clarifier, an aerobic digester, and a chlorine contact chamber. Treatment units in the Interim II phase will include a headworks screen, two aeration basins, a clarifier, an aerobic digester, and a chlorination chamber. Treatment units in the Final phase will include a headworks screen, four aeration basins, two clarifiers, two aerobic digesters, and two chlorination chambers. The proposed discharge route for the treated effluent is to Clear Fork Plum Creek, then to Plum Creek in Segment No. 1810 of the Guadalupe River Basin.

Technical Review

Staff in the ED's Water Quality Division, (**WQD staff**) performed multiple analyses for the Technical Review of the proposed permit, including but not limited to,

a Receiving Water Assessment performed by WQD staff on the Standards Implementation Team (**Standards Team**) and Water Quality Modeling runs by WQD staff in the Water Quality Assessment Section (**Modeling Team**) that used an “uncalibrated QUAL-TX” model. The Receiving Water Assessment, along with other available information, allowed the Standards Team to preliminarily determine the aquatic life uses in the area of the proposed discharge’s impact and assigned the corresponding Minimum Dissolved Oxygen (**DO**) criterion as stipulated in the Texas Surface Water Quality Standards (**TSWQS**) (30 TAC § 307.5) and the TCEQ’s *Implementation procedures for the Texas Surface Water Quality Standards-June 2010 (IPs)*. For every new discharge, the Standards Team performs antidegradation analysis of the proposed discharge. Because the proposed discharge is directly to an unclassified water body, the Standards Team reviewed this permitting action in conformity with 30 TAC §§ 307.4(h) and (l) of the TSWQS and determined that Clear Fork Plum Creek, an unclassified waterbody, uses are high aquatic life use with a corresponding DO criteria of 5.0 mg/L DO. 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 or assumptions employed in the applicable review or analysis.

The designated uses for Segment No. 1810, as stated in the 2018 TSWQS-Appendix A (30 TAC § 307.10) are primary contact recreation, public water supply, aquifer protection, and high aquatic life use. The Standards Team, in accordance with the TSWQS and the TCEQ’s IPs, performed an Antidegradation Review of the receiving waters with the Tier 1 review preliminarily determining that existing water quality uses will not be impaired by the proposed discharge. The Tier 2 review preliminarily determined that no significant degradation of water quality is expected in Clear Fork Plum Creek, identified as having high aquatic life use. Numerical and narrative criteria protecting existing uses will be maintained with no significant degradation of water quality expected in waterbodies within the discharge route with exceptional, high, or intermediate aquatic life uses. Segment No. 1810 is not currently listed on the State’s inventory of impaired and threatened waters (the 2020 CWA § 303(d) list).

The proposed permit’s water quality-related effluent limitations (**limits**), established by WQD staff’s uncalibrated 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**), and Ammonia Nitrogen (**NH₃-N**), 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 the Modeling Team’s results, effluent limits for all flow phases of 10.0 mg/L CBOD₅, 3.0 mg/L NH₃-N, and 4.0 mg/L DO, based on a 30-day average, is predicted to ensure that DO will be maintained above the criterion established by the Standards Team for Clear Fork Plum Creek (5.0 mg/L DO). Coefficients and kinetics used in the model are a combination of site specific, standardized default, and estimated values.

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 TSWQS (30 TAC §§ 307.1-10, effective 7/22/2010) and the EPA-approved portions of the TSWQS (effective 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 pH criteria in the TSWQS 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 TSWQS due to relatively smaller discharge volumes authorized by these permits. TCEQ sampling conducted throughout Texas indicating instream buffering quickly restores pH levels to ambient conditions, informs this conservative approach.

The discharge from the proposed permit is not expected to impact any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (TPDES; September 14, 1998; October 21, 1998 update). 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 USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. With respect to the presence of endangered or threatened species, the proposed permit does not require EPA's review.

Procedural Background

The TCEQ received the application on February 2, 2022, and declared it administratively complete on March 23, 2022. The Applicant published the Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) in Caldwell County, Texas in the *Lockhart Post Register* on April 7, 2022. The ED completed the technical review of the application on May 18, 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 Caldwell County, Texas in the *Lockhart Post Register* on June 23, 2022. The public comment period ended on July 25, 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: 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.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 has been available for viewing and copying at the at the Dr. Eugene Clark Library located at 217 South Main Street, Lockhart, Texas 78664, 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.

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 11) in Austin, TX at (512) 339-2929 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 third 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 proposed facility is out of compliance with TCEQ rules, enforcement actions may arise.

COMMENTS AND RESPONSES

COMMENT 1:

Shalaina Walker commented in opposition to the proposed permit and facility, and specifically the proposed facility's location.

RESPONSE 1:

The ED acknowledges the opposition to the proposed permit, facility, and the proposed location of the proposed facility. Texas Water Code (TWC) § 26.027, authorizes the TCEQ to issue permits for discharges into water in the state. The ED evaluates applications for wastewater treatment plants based on the information provided in the application. The ED can recommend issuance or denial of an application based on whether the application complies with the TWC and TCEQ regulations.

The Applicant is the entity that proposes the location of the facility, point of discharge, and the discharge route rather than the ED. The ED's review evaluates the impact of the discharge on the receiving waters; however, the TCEQ's permitting authority does not include the ability to mandate a different location for the facility if the location in the application complies with 30 TAC Chapter 309, Subchapter B (Location Standards), specifically 30 TAC § 309.13 pertaining to "Unsuitable Site Characteristics" for a treatment facility.

Instead, the ED may only evaluate a proposed location for a wastewater treatment facility according to the Location Standards in the TCEQ regulations and the effect(s) of the treated wastewater on the uses of the receiving stream starting at the point of discharge. The ED must provide the proper effluent limitations to protect these uses.

If an Applicant were revise its application with a different location and discharge route for a treatment facility, the ED would reevaluate the new location and discharge route to make sure that the permit contains proper limits and conditions for the revised discharge route and location, which may require notice to additional landowners because of the new facility location and discharge route.

COMMENT 2:

Shalaina Walker commented expressing concerns about her and her family's health, as well as the health of wildlife in the area. Dana Garrett commented expressing concern about negative impact on human health, wildlife on her property, and the health of water-dependent species. GBRA commented that granting a discharge permit that does not protect water quality, adversely affects GBRA, and thwarts its legislative directive to preserve the water within its district.

RESPONSE 2:

The health concerns of residents, as well as those of the public, 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, and 309, including specific rules for wastewater treatment systems under Chapters 217 and 309.

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. Further, WQD Staff developed the proposed permit to preclude significant degradation of water quality in the waterbodies within the discharge route. The proposed permit includes effluent limitations and monitoring requirements designed to ensure protection of the receiving waters in accordance with TCEQ rules and procedures.

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 meet the requirements of

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

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 accordance with the TSWQS (30 TAC Chapter 307) and the TCEQ IPs 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 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.

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

As specified by 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 ensures these water quality standards will be supported.

To achieve the goal of maintaining a level of water quality sufficient to protect the existing uses of the receiving waters, during the Technical Review of the application process, WQD Staff review all applications in accordance with the TSWQS and the TCEQ IPs. 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 that were developed by WQD Staff on the Modeling Team to maintain and protect the existing uses of the receiving waters (primary contact recreation, public water supply, and high aquatic life), which were identified by WQD Staff on the Standards Team.

The Modeling Team 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 protection of aquatic life. In many cases, effluent discharges decrease DO levels in waterbodies. To ensure that discharges do not lower DO levels below criteria established for those water bodies by the Standards Team, DO modeling analyses are performed to evaluate whether the proposed permit's effluent limits are predicted to ensure the DO concentrations in the discharge route will be maintained above the criteria established by the Standards Team.

Based on the model results, the effluent set in the proposed permit in all phases, based on a 30-day average, are 10 mg/l BOD₅, 15 mg/l TSS, 3.0 mg/l NH₃-N, 126 colony forming units or most probable number of *E. coli* per 100 ml; and the effluent must contain a minimum DO of 4.0 mg/l, which 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.

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.

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. 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), which 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 are the assigned aquatic life uses themselves, which govern what uses and criteria will apply to protect Segment No. 1810 of the Guadalupe River Basin and the creeks upstream of Segment No. 1810, 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 that will discharge to first to Clear Fork Plum Creek, which is unclassified and has a “high aquatic life” use. Waterbodies that support exceptional and high aquatic life uses have associated criteria that protect both the aquatic life that live in the waterbodies and terrestrial wildlife that use the waterbodies as a source of water or food. Additionally, Minor municipal facilities with conventional domestic sewage do 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 wastewater. However, the proposed facility does not, and the proposed discharge will have to meet a high DO criterion to support an aquatic community with exceptional and high-existing aquatic life uses. The proposed permit’s limits will protect the uses and quality of the receiving waters of the discharge route for the benefit of the aquatic life and terrestrial wildlife that depend on it.

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 is prohibited from causing significant degradation of water quality in any water bodies that exceed fishable/swimmable quality, such as Segment No. 1810. 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

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

³ Phau-Lockhart 450, LLC Draft Permit, Effluent Limitations and Monitoring Requirements, page 2; *see also* 30 TEX. ADMIN. CODE § 309.3(g)(2)

organisms, consumption of drinking water, or any combination of the three, the WQD Staff wrote the proposed permit with provisions to ensure that the TSWQS will be maintained, ensuring the proposed discharge is protective of aquatic life, human health, and the environment.

COMMENT 3:

Dana Garrett commented that the 499,000 gallons per day of wastewater will be detrimental to the flora and fauna of the pristine Clear Fork Creek. GBRA is concerned that the proposed permit effluent limitations are not sufficiently protective. GBRA commented that the proposed permit is inconsistent with the goals of the Plum Creek Watershed Protection Plan (WPP), as well as the recommendations and best management practices established by the plan to reduce nutrient loading in the watershed.

RESPONSE 3:

Consistent with TCEQ's IPs (June 2010), a nutrient screening was performed for the proposed discharge. The result of the screening indicated that site-specific conditions in the receiving waters may be conducive to algal growth. Therefore, a nutrient limit of 0.5 mg/L of total phosphorus was added to the permit to reduce nutrient loading. The 0.5 mg/L limit is lower than the Plum Creek WPP recommendations of 1 mg/L. Based on model results, the proposed effluent limits of 10 mg/l CBOD₅, 3 mg/L NH₃-N, and 4.0 mg/L dissolved oxygen were predicted to be adequate to maintain the numeric criteria for dissolved oxygen levels of 5.0 mg/L for Clear Fork of Plum Creek as stipulated in the Texas Surface Water Quality Standard's (TSWQS) 30 TAC Chapter 307. The increased level of effluent treatment for WWTFs suggested by the Plum Creek WPP is voluntary and non-regulatory, and the effluent limitations in the proposed permit are based on and consistent with TCEQ modeling procedures.

COMMENT 4:

Shalaina Walker commented expressing concern about pest attraction and her and her family's quality of life.

RESPONSE 4:

According to the TCEQ rules, the plans and specifications of the plant design must comply with 30 TAC Chapter 217, relating to "Design Criteria for Domestic Wastewater Systems." The Applicant is required at all times to ensure that the proposed facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. Consequently, health impacts from pests should not occur. Nearby residents' quality of life is protected by the fact that the Applicant is only authorized to discharge according to the limitations, monitoring requirements, and other conditions listed in the draft permit. The draft permit does not grant the permittee the right to use private or public property for conveyance of wastewater along the discharge route.

Additionally, the proposed permit does not limit any landowner's ability to seek private action against the applicant regarding any potential trespass, nuisance, or other cause of action in response to the proposed facility's activities that may result in injury to human health or property or interference with the normal use and enjoyment of property. If anyone experiences any suspected incidents of noncompliance with the

permit or TCEQ rules, they may reported to the TCEQ by calling the toll-free number, 1-888-777-3186, or the TCEQ Regional Office (Region 11) in Austin, TX at (512) 339-2929. Complaints may be filed electronically by using the methods described in the third 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 proposed facility is out of compliance with TCEQ rules, enforcement actions may arise.

COMMENT 5:

Shalaina Walker commented expressing concerns about foul odors from the proposed facility.

RESPONSE 5:

Instances of foul odors from a discharge of treated wastewater can exist when there are insufficient levels of dissolved oxygen (DO) present in the effluent; and therefore, all wastewater treatment facilities (WWTF) have the potential to generate odors. To prevent odors from occurring, the number of oxygen-demanding constituents must be controlled. The proposed effluent limitations, specifically the minimum dissolved oxygen limit, restrict the amount of oxygen-demanding constituents and are set at levels to significantly reduce the odors in the effluent being discharged and prevent degradation of the receiving waters. Additionally, nuisance-odor controls have been incorporated into the proposed permit.

To control and abate odors, the TCEQ rules require domestic WWTFs to meet buffer zone requirements for the abatement and control of nuisance odor according to 30 TAC § 309.13(e), which provides options for applicants to satisfy the nuisance odor abatement and control requirements. The options are: 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 the Applicant; or 3) providing nuisance odor control.

According to the application, the proposed facility intends to comply with the requirement to abate and control nuisance odors by locating the treatment units at least 150 feet from the nearest property line and by legal restrictions prohibiting residences within the buffer zone. These requirements and legal restrictions are incorporated in the proposed permit. Therefore, nuisance odors are not expected to occur because of the permitted activities at the proposed facility if the Applicant operates the proposed facility in compliance with TCEQ's rules and the terms and conditions of the proposed permit.

The proposed permit does not limit a landowner's ability to seek private action against the Applicant; and if anyone experiences any suspected incidents of noncompliance with the permit or TCEQ rules, they may reported to the TCEQ by calling the toll-free number, 1-888-777-3186, or the TCEQ Regional Office (Region 11) in Austin, TX at (512) 339-2929. Complaints may be filed electronically by using the methods described in the third 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 proposed facility is out of compliance with TCEQ rules, enforcement actions may arise.

COMMENT 6:

Shalaina Walker commented on the proposed facility's adverse impact to her property value of her family's home.

RESPONSE 6:

The ED acknowledges the significance of this concern; however, the TCEQ does not have the authority to address property values as part of the wastewater permitting process. While the ED encourages the participation of all citizens in the environmental permitting process, there are certain concerns of citizens 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. The Texas Legislature has given the TCEQ the responsibility to protect water quality, and section 26.027 of the Texas Water Code authorizes the TCEQ to issue permits to control the discharge of wastes or pollutants into state waters and to protect the water quality of the state's rivers, lakes, and coastal waters. As discussed above the proposed permit protects water quality according to the TCEQ rules and the Texas Water Code. However, the ED, through his Water Quality Division, has no jurisdiction to address fluctuations in property values or the conservation efforts of a River Authority 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.

Alternatively, nothing in the proposed permit limits the ability of nearby landowners to use common law remedies for trespass, nuisance, or other causes of action in response to activities that may or do result in injury or adverse effects on human health or welfare, animal life, vegetation, or property.

Nor does the proposed permit limit the ability of a nearby landowner to seek relief from a court in response to activities that may or do interfere with the use and enjoyment of their property. If the Applicant's activities create any nuisance conditions, the TCEQ may be contacted to investigate whether a permit violation has occurred. Potential permit violations may be reported to the TCEQ Regional Office (Region 11) in Austin, TX at (512) 339-2929, or by calling the statewide toll-free number at 1-888-777-3186. Complaints may be filed electronically by using the methods described above in the third subsection of Background Information (Access to Rules, Laws, and Records).

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.

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
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REPRESENTING THE EXECUTIVE DIRECTOR
OF THE TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

CERTIFICATE OF SERVICE

I certify that on September 23, 2022, the Executive Director's Response to Public Comment for Permit No. WQ0016107001 was filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk.



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

INTERIM I EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the completion of expansion to the 0.25 million gallons per day (MGD) facility, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.125 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 347 gallons per minute.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Min. Self-Monitoring Requirements</u>	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Max. Single Grab Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (5.2)	10	20	30	One/week	Grab
Total Suspended Solids	5 (5.2)	20	40	60	One/week	Grab
Ammonia Nitrogen	2 (2.1)	5	10	15	One/week	Grab
Total Phosphorus	0.5 (0.5)	1	2	3	One/week	Grab
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	126	N/A	N/A	399	One/month	Grab

2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall 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 shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per week by grab sample.

INTERIM II EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the completion of expansion to the 0.25 million gallons per day (MGD) facility, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.25 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 694 gallons per minute.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Min. Self-Monitoring Requirements</u>	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Max. Single Grab Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (10)	10	20	30	One/week	Grab
Total Suspended Solids	5 (10)	20	40	60	One/week	Grab
Ammonia Nitrogen	2 (4.2)	5	10	15	One/week	Grab
Total Phosphorus	0.5 (1.0)	1	2	3	One/week	Grab
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	126	N/A	N/A	399	One/month	Grab

2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall 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 shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per week by grab sample.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the completion of expansion to the 0.499 million gallons per day (MGD) facility and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.499 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 1,386 gallons per minute.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Min. Self-Monitoring Requirements</u>	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Max. Single Grab Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (21)	10	20	30	One/week	Grab
Total Suspended Solids	5 (21)	20	40	60	One/week	Grab
Ammonia Nitrogen	2 (8.3)	5	10	15	One/week	Grab
Total Phosphorus	0.5 (2.1)	1	2	3	One/week	Grab
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	126	N/A	N/A	399	One/month	Grab

2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall 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 shall be monitored five times per week by grab sample at each chlorine contact chamber. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per week by grab sample.