

TPDES Permit No. WQ0005213000

APPLICATION BY	§	BEFORE THE
CITY OF ABILENE FOR TPDES	§	TEXAS COMMISSION
PERMIT NO. WQ0005213000	§	ON ENVIRONMENTAL
	§	QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comment (Response or RTC) on the application by the City of Abilene (Applicant) for a renewal of Texas Pollutant Discharge Elimination System (TPDES) permit No. WQ0005213000 and the Executive Director'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 Executive Director prepares a response to all timely, significant or relevant and material comments. The Office of the Chief Clerk received timely comments from the individuals and organizations listed in the master appendix. This response addresses all timely public comments received, whether or not withdrawn.

This application is subject to the requirements in Senate Bill (SB) 709, effective September 1, 2015. SB 709 amended the requirements for comments and contested case hearings. One of the changes required by SB 709 is that the Commission may not find that a "hearing requestor is an affected person unless the hearing requestor timely submitted comments on the permit application." Texas Water Code (TWC) § 5.115(a-1)(2)(B). To determine which commenter made a particular comment, please refer to the appendix.

If you need more information about this permit application or the wastewater permitting process, please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found at the following website:

www.tceq.texas.gov.

I. BACKGROUND

A. Description Of Facility

The City of Abilene (Applicant) submitted an application to the TCEQ for a renewal of TPDES Permit No. WQ0005213000 to authorize the discharge of water treatment waste at an annual average flow not to exceed 1,510,000 gallons per day via Outfall 001. The Applicant proposes to operate the Possum Kingdom Raw Water Roughing Facility (RWRF), a reverse osmosis water treatment facility.

Possum Kingdom Lake raw water will be treated with a microfiltration (MF) and reverse osmosis (RO) system and transferred for additional water treatment prior to distribution. A portion of the raw surface water will undergo MF and RO to reduce chloride and total dissolved solids (TDS) levels. A membrane feed pump station will transfer raw water from the raw water storage tank to the MF system. The MF system will consist of a primary recovery system and a tertiary recovery system designed to maximize recovery of raw water through the MF system. The primary and tertiary recovery MF systems will provide a net recovery of raw water of approximately 99%. The MF system will send MF filtrate feed water to a 3-stage RO system designed for 85-90% recovery depending on the season and raw water temperature. The RO permeate and untreated raw surface water will be blended together in the Product Water Storage Tank before being pumped to the City of Abilene Grimes Water Treatment Plant (WTP), the Northeast WTP, or both for complete water treatment. The quality of the product water will generally match raw water quality in Hubbard Creek Reservoir, which the RWRF water supply is intended to replace during the times of dry weather and drought. Reject water will be transferred offsite via approximately 24 miles of 12-inch PVC pipe to proposed Outfall 001 in the Cedar Creek Arm of Possum Kingdom Lake. The outfall will consist of a unidirectional multiport diffuser that is 12 meters long with 10 equally spaced ports.

The ports will be angled upwards at 60 degrees from the horizontal with the diffuser perpendicular to the bank so wastewater will be discharged generally parallel to the bank and toward the main pool of the lake. Each port will use a variable velocity orifice valve arranged in a fanned-out pattern. The port area will vary with effluent flow. Water treatment wastes will be discharged at an annual average flow of 1.09 MGD

(with a daily maximum of 1.38 MGD) during Phase I and at an annual average flow of 1.51 MGD (with a daily maximum of 1.81MGD) during Phase II via Outfall 001.

Other waste streams (tertiary MF backwash waste, MF and RO clean-in-place wastes, plant drains, and domestic wastewater) must be disposed of in an approved manner, such as routing to an authorized third party for treatment and disposal.

This permit does not authorize the discharge of domestic wastewater. All domestic wastewater must be disposed of in an approved manner, such as routing to an approved on-site septic tank and drainfield system or to an authorized third party for treatment and disposal.

Following facility startup, the treated effluent will be discharged via Outfall 001 directly to Possum Kingdom Lake in Segment No. 1207 of the Brazos River Basin. The designated uses for Segment No. 1207 are primary contact recreation, public water supply, and high aquatic life use. The effluent limits in the draft permit will maintain and protect the existing instream uses. All determinations are preliminary and subject to additional review and revisions.

Geographic coordinates of the outfall location in decimal degrees are provided in Table 1. The facility is located at 105 East Elliot Street, in the City of Breckenridge, Stephens County, Texas 76424.

Table 1. Outfall Coordinate Location

Outfall Number	Latitude	Longitude
001	32.886100	-98.588000

The draft permit includes the following proposed effluent limitations and monitoring requirements. All flows are expressed in million gallons per day (MGD). All pH values are expressed in standard units (SU). Concentration values are expressed in milligrams per liter (mg/L).

Table 2. Interim Phase Effluent Limitations: Outfall 001

Parameter/Pollutant	Daily Average	Daily Maximum	Single Grab
	mg/L	mg/L	mg/L
Flow	1.09 MGD	1.38 MGD	-
Total Dissolved Solids	-	Report	-
Chloride	-	Report	-
Sulfate	-	Report	-
pH, SU	6.0, Daily Min	9.0, Daily Max	-

Table 3. Final Phase Effluent Limitations: Outfall 001

Parameter/Pollutant	Daily Average	Daily Maximum	Single Grab
	mg/L	mg/L	mg/L
Flow	1.51 MGD	1.81 MGD	-
Total Dissolved Solids	-	Report	-
Chloride	-	Report	-
Sulfate	-	Report	-
pH, SU	6.0, Daily Min	9.0, Daily Max	-

B. Procedural Background

The permit application was received on March 7, 2023, and declared administratively complete on June 16, 2023. The Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) was published on July 26, 2023, in the *Breckenridge American* and on June 22, 2023, in *La Prensa Comunidad*. The Notice of Application and Preliminary Decision (NAPD) was published on February 28, 2024, in the *Breckenridge American* and on March 5, 2024, in *La Prensa Comunidad*.

A Notice of Public Meeting was published on May 15, 2024, in the *Breckenridge American*. A public meeting was held, as scheduled, on June 18, 2024, at the Possum Kingdom Lake Chamber of Commerce in Graford, Texas.

The public comment period ended at the close of the public meeting on June 18, 2024. This application was filed on or after September 1, 2015; therefore, this application is subject to the procedural requirements adopted pursuant to House Bill (HB) 801, 76th Legislature (1999), and Senate Bill (SB) 709, 84th Legislature (2015), both implemented by the Commission in its rules in 30 TAC Chapters 39, 50, and 55. The Texas Legislature enacted SB 709, effective September 1, 2015, amending the requirements for comments and contested case hearings. This application is subject to those changes in the law.

C. Access to Rules, Laws, and Records

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

- Secretary of State website: www.sos.state.tx.us;
- TCEQ rules in 30 TAC: www.sos.state.tx.us/tac;
- Texas statutes: www.statutes.legis.state.tx.us;
- TCEQ downloadable rules: www.tceq.texas.gov/rules/indxpdf.html;
- Federal rules in Title 40 of the Code of Federal Regulations: <https://www.ecfr.gov/current/title-40>; and
- Federal environmental laws: www.epa.gov/lawsregs.

Commission records for this application are available for viewing and copying and are located at TCEQ's main office in Austin, 12100 Park 35 Circle, Building F, 1st Floor (Office of Chief Clerk). The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at the following location: Breckenridge Public Library, 209 North Breckenridge Avenue, Breckenridge, Texas.

II. COMMENTS AND RESPONSES

Comment 1:

The individuals in Appendix A provided comments expressing concern about algal blooms from the discharge of water treatment wastes.

Response 1:

Phosphorus is a key nutrient necessary for algae growth and is often in limited supply in freshwater systems. When Executive Director's staff's analysis of a discharge permit application shows the effluent has the potential to cause nutrient issues that could lead to conditions such as algal blooms in the receiving waters, the usual course of action is to add total phosphorus effluent limits to the draft permit to control nutrient levels entering the receiving waters. For this application, the raw water will be treated with microfiltration and reverse osmosis, therefore no nutrient contribution beyond what is present in the raw water is anticipated. Wastewater originating from human or animal waste is typically what accounts for nutrient concerns and does not apply to this facility.

Comment 2:

The individuals in Appendix B provided comments expressing concern about aquatic life and the designated uses of the receiving segment.

Response 2:

The Texas Surface Water Quality Standards (TSWQS) in 30 TAC Chapter 307 require that discharges may not degrade the receiving waters and may not result in situations that impair existing, attainable or designated uses, and that surface waters not be toxic to aquatic life, terrestrial wildlife, livestock, or domestic animals.¹ The effluent limits and monitoring requirements in the draft permit are set to maintain and protect the existing instream uses.

In this case, the designated uses for Segment No. 1207 are primary contact recreation, public water supply, and high aquatic life use.² The Executive Director determined that these uses should be protected if the facility is operated and maintained as required by the proposed permit and regulations. The Executive Director has made a preliminary determination that the draft permit, if issued, meets all statutory and regulatory requirements.

The Texas Parks and Wildlife Department (TPWD) is the state agency that oversees and protects wildlife and their habitat. It can be contacted by calling 1-800-792-1112 or by mail at 4200 Smith School Road, Austin, Texas 78744. TPWD received notice of Applicant's permit application.

Comment 3:

The individuals in Appendix C provided comments expressing concern regarding chemicals commonly found in domestic wastewater such as *Escherichia coli* (*E. coli*).

Response 3:

The Possum Kingdom Raw Water Roughing Facility is a reverse osmosis water treatment facility, which will treat Possum Kingdom Lake water with a microfiltration and reverse osmosis system. Domestic wastewater generated onsite must be disposed

¹ 30 TEX. ADMIN. CODE § 307.6(b)(4).

² Texas Surface Water Quality Standards, 30 TEX. ADMIN. CODE § 307.10.

of in an approved manner, such as routing to an authorized third party for treatment and disposal.

Any bacteria or pollutants typically found in domestic wastewater will not be generated by the Possum Kingdom Raw Water Roughing facility and are not expected to be discharged via Outfall 001. Any discharge of *E. coli* and other pollutants associated with domestic wastewater will already be present in the Possum Kingdom Lake and will not result in a violation of the criteria established in the Texas Surface Water Quality Standards.

Comment 4:

The individuals in Appendix D provided comments expressing concerns about the City of Abilene's compliance with the draft permit, along with monitoring and reporting requirements established therein.

Response 4:

The City of Abilene has reviewed and accepted the draft permit. As a result of the Applicant's acceptance, the Possum Kingdom RWRf must comply with the conditions contained within the draft permit, including all monitoring and reporting requirements established therein.

The Applicant is required to sample and analyze the treated effluent and provide monthly reports to the TCEQ that include the results of the analyses. The Applicant may either collect and analyze the effluent samples itself, or it may contract with a third party for either or both the sampling and analysis. However, all samples must be collected and analyzed according to 30 TAC Chapter 319, Subchapter A, Monitoring and Reporting System. The Applicant is required to further notify the agency if the effluent does not meet the permit limits according to the requirements in the permit. In addition, the TCEQ regional staff may sample the effluent during routine inspections or in response to a complaint.

If the facility is found to be out of compliance with the terms or conditions of the permit, the Applicant may be subject to enforcement. If anyone experiences any suspected incidents of noncompliance with the permit or TCEQ rules, they may report these by calling the TCEQ Environmental Complaint Line at 1-888-777-3186. Calls will be routed automatically to the closest TCEQ regional office. Complaints may also be

filed online at tceq.texas.gov/compliance/complaints. If the Applicant fails to comply with all requirements of the permit, it may be subject to enforcement action.

Comment 5:

The individuals in Appendix E provided comments inquiring as to why the facility has not been constructed since the original permit was issued and whether this permit action would qualify as a new permit.

Response 5:

The timeline for the completion of construction of a permitted facility is up to the permittee. Neither the statute nor the proposed draft permit includes a requirement to start construction of the facility within a certain time period upon obtaining a permit. However, the proposed draft permit includes an expiration date, and the Applicant must apply for a renewal of the permit prior to the expiration date if the Applicant wishes to retain TCEQ authorization. The application for renewal requires the Applicant to submit information concerning the need for the facility if it is not constructed, or for unbuilt phases that have been permitted for more than five years. TCEQ reviews this information and determines if the renewal of the permit is justified or if unbuilt phases should be removed from the permit. While the facility has not completed construction and has not discharged over the course of the permit term, the City of Abilene still retains its authorization to discharge under the conditions established in the existing permit. Therefore, the City of Abilene does not need to apply for a new permit.

Comment 6:

The individuals in Appendix F provided comments expressing concern about perceived discrepancies between the design parameters of the diffuser versus the parameters of the installed diffuser.

Response 6:

It is the Applicant's responsibility to construct and install a diffuser consistent with the information provided in the application for the TCEQ's review of the diffuser, which included a diffuser report covering the design and installation of the diffuser that was stamped and sealed by the Applicant's licensed professional engineer.

As provided by state law, a permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act, Texas Water Code §§ 26, 27, and 28, and the Texas Health and Safety Code § 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under the draft permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.³

Comment 7:

The individuals in Appendix G expressed concerns regarding the use of Possum Kingdom Lake as a public water supply and the protection of drinking water standards.

Response 7:

TCEQ's rules do not require water treatment wastes from reverse osmosis systems to be treated to potable standards before discharging to water in the state. State and federal regulations require that treated effluent maintain the existing uses of the receiving waters as designated within the Texas Surface Water Quality Standards at 30 TAC Chapter 307.

One of the designated uses assigned to Possum Kingdom Lake is Public Water Supply. Compliance with the Public Water Supply designation is evaluated by comparing laboratory analysis of the effluent with the calculated effluent limitations necessary to protect human health. The effluent limitations are calculated based upon the human health criteria to protect drinking water and fish consumption listed within Table 2 of 30 TAC Chapter 307. The human health criteria are derived in accordance with EPA guidance. However, if a calculated criterion is greater than the applicable maximum contaminant level (MCL) in 30 TAC Chapter 290 (relating to Public Drinking Water), then the MCL is used as the criterion. As discussed elsewhere in this response to public comment, the draft permit complies with all applicable statutory and regulatory requirements.

³ City of Abilene Draft Permit, Monitoring and Reporting Requirements, Item 1, page 4.

As the Possum Kingdom Raw Water Roughing Facility has not discharged, no analytical data was available to submit with the application. A retest requirement has been included in the draft permit that requires the City of Abilene to complete analytical testing of the pollutants identified in Other Requirement No. 7 within 60 days of initial discharge and submit the test results to TCEQ within 90 days. Following the receipt of this information, TCEQ staff will conduct a screening to ensure the discharge is protective of the human health criteria to protect drinking water and fish consumption. If any of the pollutants identified exceed 70% of the water quality-based effluent limitations established in the statement of basis for this permit, monitoring requirements or effluent limitations will be implemented in the permit and the permit application will be re-opened via a staff-initiated permit amendment to incorporate revised effluent limitations and or monitoring requirements.

Comment 8:

The individuals in Appendix H provided comments expressing concern about drought and low flow in the receiving segment.

Response 8:

The potential impact of the proposed discharge on instream dissolved oxygen levels is evaluated under hot and dry, low-flow summertime conditions, which are typically the most restrictive conditions in regard to dissolved oxygen levels. Critical low-flow, as defined in 30 TAC § 307.3(a)(16), is a “low-flow condition that consists of the seven-day, two-year flow (7Q2),” which is the lowest seven-day average stream flow with a recurrence interval of two years. The criteria of the Texas Surface Water Quality Standards (30 TAC Chapter 307) are applicable even during critical low-flow, therefore critical low-flow is considered when evaluating the appropriate effluent limits for the proposed discharge.

The effluent limitations in the draft permit will maintain and protect the existing instream uses and comply with the Texas Surface Water Quality Standards and 30 TAC §§ 307.1 - 307.10. The proposed draft permit includes effluent limitations and monitoring requirements to ensure that the proposed wastewater treatment plant meets water quality standards for the protection of surface water quality, even during periods of low flow, according to TCEQ rules and policies.

Comment 9:

The individuals in Appendix I provided comments inquiring as to whether a site suitability study or environmental impact study has been done.

Response 9:

The National Environmental Policy Act (NEPA) requires federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. To meet this requirement, federal agencies must prepare detailed statements which include an environmental assessment and either a finding of no significant impact or environmental impact statement. However, these requirements pertain to a proposed federal action. An environmental impact statement and compliance with NEPA are not required as part of the TPDES wastewater permitting process.

For additional information about NEPA and environmental impact statements, EPA's website has a page about NEPA and how to request information at: <https://www.epa.gov/nepa>.

A site suitability study is conducted by entities to facilitate the decision-making process for a facility site location. This permit action is a renewal for a facility, for which a site has already been reviewed and granted a permit by the TCEQ. Therefore, a site suitability study was not reviewed for the purposes of this application. Additionally, the TCEQ does not utilize site suitability studies for industrial TPDES permitting as it falls beyond the scope of federal and state water quality rules.

As described in Section I.A. (Description of Facility), the Executive Director's staff in the Water Quality Division performed an administrative and technical review of the application and prepared the draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary determination that this permit, if issued, meets all statutory and regulatory requirements.

Comment 10:

The individuals in Appendix J provided comments inquiring whether studies have been done to ascertain the TDS, chloride, sulfate, and flow levels in the receiving

segment; and inquired if such studies would be conducted following the commencement of discharge.

Response 10:

A TDS, chloride, and sulfate screening was performed in compliance with TCEQ procedures using the ambient segment concentration from *The Procedures for the Implementation of the Texas Surface Water Quality Standards* (IPs; June 2010), the segment criterion from Appendix A of the 2022 Texas Water Quality Standards, and the calculated effluent fraction at the edge of the human health mixing zone (i.e., where the segment criterion would apply in the lake beyond the outfall). Using expected effluent TDS, chloride, and sulfate values, the screening determined the proposed discharge to be protective of the receiving waterbody's TDS, chloride, and sulfate criterion. Once the facility is operational and discharging, the facility will be required to report their TDS, chloride, and sulfate effluent values. The reported values will be screened to ensure compliance with segment TDS, chloride, and sulfate criteria. Permit limits may be added to the permit for any of the effluent parameters that exceed the relevant screening values.

Comment 11:

The individuals in Appendix K provided comments concerned about the accuracy and transparency of the application materials provided by the City of Abilene.

Response 11:

The application for this facility has been available for viewing and copying at the Breckenridge Public Library, 209 North Breckenridge Avenue, Breckenridge, Texas since publication of the NORI. The draft permit, the Statement of Basis/Technical Summary, and the Executive Director's preliminary decision have been available for viewing and copying at the same location since publication of the NAPD.

During regular business hours, the public may review or copy the public file for this application, which includes the application, its attachments, the comment letters, this response to public comment, the hearing requests, the responses to hearing requests, and any other communications made during the review of this application, at TCEQ's Office of the Chief Clerk located in Building F, 12100 Park 35 Circle, Austin, Texas.

As provided by state law, a permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act, Texas Water Code §§ 26, 27, and 28, and the Texas Health and Safety Code § 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under the draft permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.⁴

As described in Section I.A. (Description of Facility), the Executive Director's staff in the Water Quality Division performed an administrative and technical review of the application and prepared the draft permit.

An administratively completed application has been determined by the TCEQ to contain complete responses to all required questions in the administrative report, along with all necessary attachments for the administrative review. A technically completed application has been determined by the TCEQ to contain complete responses to all required questions in the technical report, along with all necessary attachments required for a technical review. Based on the aforementioned determinations, the TCEQ has determined that the information submitted with the application was sufficient to make a preliminary and final decision on the renewal application for Permit No. WQ0005213000.

Comment 12:

The individuals in Appendix L provided comments expressing concern regarding potential flooding of the Possum Kingdom Raw Water Roughing Facility.

Response 12:

TCEQ does not have jurisdiction to regulate flooding in the context of a wastewater discharge permit. The permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters. However, to the extent that an issue related to flooding also involves water quality, the Applicant is required to comply with all the

⁴ City of Abilene Draft Permit, Monitoring and Reporting Requirements, Item 1, page 4.

numeric and narrative effluent limitations and other conditions in the proposed permit at all times, including during flooding conditions.

TCEQ does not prohibit the location of a wastewater treatment facility in a floodplain, as long as the facility design adheres to TCEQ rules. According to the application, while the proposed facility is not located above the 100-year flood plain, the wastewater treatment units have been constructed at an elevation at or above the 100-year flood plain. As described under Section I.A (Description of Facility) above, the facility is anticipated to only operate during hydrological drought conditions within the region, which will effectively prevent the occurrence of an unauthorized discharge during the event of a 100-year flood.

Comment 13:

The individuals in Appendix M provided comments questioning the placement of Outfall 001 or requesting the TCEQ consider a different outfall location for the Possum Kingdom Raw Water Roughing Facility.

Response 13:

TCEQ does not have the authority to mandate a different discharge location or wastewater treatment plant location if the applicant's proposed location and discharge route comply with the TWC Chapter 26. TCEQ does not have jurisdiction over zoning.

If the City of Abilene updates the application with a different location or a different discharge route, the Executive Director will reevaluate the discharge route to make sure that the draft permit contains appropriate limits and conditions for the revised discharge location or route. Additionally, new landowners may need to be notified of a change of the facility location or the discharge route.

Comment 14:

The individuals in Appendix N provided comments expressing concern about livestock and other terrestrial wildlife in the region surrounding Possum Kingdom Lake.

Response 14:

The proposed permit was drafted in accordance with 30 TAC § 307.5 and the TCEQ *Procedures for the Implementation of the Texas Surface Water Quality Standards*

(IPs; June 2010). The Texas Surface Water Quality Standards (TSWQS) provide that surface waters cannot be toxic to aquatic or terrestrial organisms.⁵ While the TSWQS and the IPs do not specifically designate criteria for the protection of cattle or livestock, they do designate criteria for the protection of aquatic life that should preclude negative impacts to the health and performance of livestock or wildlife.

The Executive Director has determined that the proposed draft permit for the facility meets the requirements of the TSWQS, which are established to protect human health, terrestrial, and aquatic life.

Comment 15:

The individuals in Appendix O provided comments expressing concern about the impact to aesthetics, ecotourism, and property values the proposed facility would have on Possum Kingdom Lake.

Response 15:

TCEQ does not have the authority to address issues such as ecotourism and property values as part of the wastewater permitting process. TWC Chapter 26 and applicable wastewater regulations do not authorize TCEQ to consider such issues.

However, the permit does not limit the ability of an individual to seek legal remedies against the Applicant regarding any potential trespass, nuisance, or other causes of action in response to activities that may result in injury to human health or property or that may interfere with the normal use and enjoyment of property.

Concerning aesthetics, as they relate to receiving streams, 30 TAC Section 307.4(b) provides requirements for aesthetic parameters of surface water. These requirements are included in the draft permit in one of the narrative limitations for effluent discharge which states that “there shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.” This requirement is to ensure that the receiving stream is maintained in an aesthetically attractive condition.

⁵ 30 TEX. ADMIN. CODE § 307.4.

Comment 16:

The individuals in Appendix P provided comments regarding the money or revenue generated by granting permits.

Response 16:

There is an application fee for all wastewater disposal permits including new, renewal, or amendment permit actions. The fee is calculated based on the amount of flow and the type of permit. Please see page 2 of the Administrative Report 1.0, TCEQ Form 10053, for the application fees. The fee is due upon submittal of the application. TCEQ does not refund the application fee if a permit is denied.

The consolidated water quality fee authorized by 30 TAC Chapter 21 is a fee collected from entities that have an individual wastewater permit. The fee is assessed based on the discharge parameters of the individual permit and the toxicity of the discharged wastewater.⁶ The fee is assessed on issued wastewater permits, regardless of whether the facility is active. All resulting revenue is deposited in the water resources management account for the purpose of paying the expenses of the Commission in the following programs: water quality administration, including, but not limited to, inspection of wastewater treatment facilities and enforcement of the provisions of TWC, Chapter 26, the rules and orders of the commission related to wastewater discharges and waste treatment facilities, the Texas Clean Rivers Program (TWC § 26.0135) which monitors and assesses water quality conditions that support water quality management decisions necessary to maintain and improve the quality of the state's water resources, and any other water resource management programs reasonably related to the activities of the persons required to pay a fee under TWC, § 26.0291.⁷

Comment 17:

The individuals in Appendix Q provided comments regarding other treatment and disposal options for the Possum Kingdom Raw Water Roughing Facility.

⁶ 30 TEX. ADMIN. CODE § 21.3.

⁷ 30 TEX. ADMIN. CODE § 21.1.

Response 17:

TCEQ does not have the authority to mandate the method of disposal of treated effluent if the applicant adheres to the rules and provisions under TWC Chapter 26 and 30 TAC Chapters 305 and 307.

Treated effluent may also be disposed of via land application. A Texas Land Application Permit (TLAP) authorizes the disposal of treated effluent by means of surface irrigation, subsurface irrigation, or evaporation. The effluent must be treated to the pollutant concentrations prescribed by the executive director. If the Applicant changes the proposed method of disposal, this would require further review by TCEQ and additional public notice.

Further, treated effluent may also be utilized for beneficial use pursuant to 30 TAC Chapter 210, relating to "Use of Reclaimed Water," however this is an authorization beyond the scope of an individual industrial TPDES or TLAP permit.

Comment 18:

The individuals in Appendix R provided comments expressing concern about the oversight, operation, and maintenance of the City of Abilene Water Roughing Facility along with any spills or malfunctions that may occur.

Response 18:

TCEQ issues permits that describe the conditions under which the wastewater 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.

TCEQ's Office of Compliance and Enforcement ensures compliance with applicable state and federal regulations. The Region 3 office is required to conduct a mandatory comprehensive compliance investigation (CCI) at minor facilities once every five fiscal years. Additional mandatory investigations can be required if the facility is categorized as significant noncompliance (SNC). SNC is determined by the Compliance Monitoring Section of the TCEQ and is based on self-reported effluent violations.

If the facility is found to be out of compliance with the terms or conditions of the permit, the Applicant may be subject to enforcement. If anyone experiences any suspected incidents of noncompliance with the permit or TCEQ rules, they may report

these by calling the TCEQ Environmental Complaint Line at 1-888-777-3186. Calls will be routed automatically to the closest TCEQ regional office. Complaints may also be filed online at tceq.texas.gov/compliance/complaints. If the Applicant fails to comply with all requirements of the permit, it may be subject to enforcement action.

An unauthorized discharge is a violation of the proposed permit for which an enforcement action can be brought by TCEQ against the Applicant.

However, the proposed permit would not limit anyone's ability to seek legal remedies from 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 interfere with the normal use and enjoyment of property.

Comment 19:

Darrin Keys provided a comment expressing concern of potential pharmaceutical discharges from the Possum Kingdom Raw Water Roughing Facility.

Response 19:

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

Accordingly, neither TCEQ nor the EPA have rules on the treatment of contaminants such as pharmaceuticals in domestic wastewater. However, as this facility does not discharge domestic wastewater, and solely conducts microfiltration and reverse osmosis treatment on water withdrawn from Possum Kingdom Lake, there is no risk of the discharge adding PPCPs to the lake. Any PPCPs present in the discharge would be a result of the presence of these pollutants in the source water.

Comment 20:

The individuals in Appendix S provided comments inquiring about the monitoring in the draft permit. Both in how the discharge would be monitored and whether monitoring would be sufficient to protect Possum Kingdom Lake.

Response 20:

TCEQ is responsible for the protection of water quality with federal regulatory authority over discharges of pollutants to Texas surface water, with specific exceptions for oil and gas exploration and development activities. The TCEQ has a legislative responsibility to protect water quality in the State of Texas and to authorize wastewater discharge TPDES permits under TWC Chapter 26, and 30 TAC Chapters 305 and 307.

The proposed draft permit was developed in accordance with the Texas Surface Water Quality Standards 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 methodology outlined in the *Procedures to Implement the Texas Surface Water Quality Standards* (IPs; June 2010) is designed to ensure compliance with the TSWQS (30 TAC Chapter 307).

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

As part of the application process, TCEQ staff must determine the uses of the receiving waters and set effluent limits that are protective of those uses. In order to achieve the goal of maintaining a level of water quality sufficient to protect existing water body uses, the proposed permit contains several water quality specific parameter requirements that limit the potential impact of the discharge on the receiving waters.

As the Possum Kingdom Raw Water Roughing Facility has not discharged, no analytical data was available to submit with the application. A retest requirement has been included in the draft permit that requires the City of Abilene to submit analysis

of the pollutants identified in Other Requirement No. 7 within 60 days of initial discharge. Following the receipt of this information, a screening will be conducted to ensure the discharge is protective of water quality in Possum Kingdom Lake. If any of the pollutants identified exceed 70% of the water quality-based effluent limitations established in the statement of basis for this permit, monitoring requirements or effluent limitations will be implemented in the permit and the permit application will be re-opened. Water quality-based effluent limitations are based on stream standards and waste load allocations for water quality-limited streams as established in the TSWQS and the State of Texas Water Quality Management Plan (WQMP).

Comment 21:

The individuals in Appendix T provided comments expressing concern about the levels of total dissolved solids, chloride, and sulfates discharged from the Possum Kingdom Raw Water Roughing Facility.

Response 21:

The *Procedures for the Implementation of the Texas Surface Water Quality Standards* (IPs; June 2010) require that concentrations and relative ratios of dissolved minerals such as chloride and sulfate that compose TDS be maintained to protect existing and attainable uses. A preliminary total dissolved solids screening was performed with expected effluent salinity values and was determined to be protective of the receiving waterbody and its uses. Additionally, once the facility is operational and discharging, the facility will be required to report their effluent total dissolved solids, chloride, and sulfate effluent values to ensure they are complying with the terms of their permit. A full discussion of the TDS screening procedures can be found in the IPs on page 175.

Comment 22:

The individuals in Appendix U provided comments expressing concern with the variables used for the CORMIX model conducted for this permit action.

Response 22:

Information regarding diffuser design and effluent density characteristics has been provided by the applicant. The current analysis relies, in part, on the applicant's diffuser report and a previous TCEQ diffuser report. Ambient data used for the

analysis is from surface water quality monitoring stations near the discharge location. The analysis is consistent with current standardized TCEQ procedures. However, the results of this evaluation can be reexamined upon receipt of information that conflicts with the information employed in this analysis.

Comment 23:

The individuals in Appendix V provided comments expressing concern with the effectiveness of the diffuser in dispersing the effluent during low flow conditions, which is consistent with current standardized TCEQ procedures.

Response 23:

The water depth is an important parameter used in the analysis. Water body width and depth near the proposed discharge location were provided in the application. Our analysis relies on the information provided by the applicant.

Comment 24:

The individuals in Appendix W provided comments expressing opposition to the draft permit.

Response 24:

The ED has noted these comments.

III. CHANGES MADE TO THE DRAFT PERMIT IN RESPONSE TO COMMENTS

In response to Public Comments, the Executive Director made no changes to the draft permit.

Respectfully submitted,

Texas Commission on Environmental Quality

Kelly Keel,
Executive Director

Charmaine Backens, Deputy Director
Environmental Law Division



Aubrey Pawelka, Staff Attorney
Environmental Law Division
State Bar No. 24121770
P.O. Box 13087, MC 173
Austin, Texas 78711-3087
Phone (512) 239-0622
Fax: (512) 239-0606

REPRESENTING THE EXECUTIVE DIRECTOR OF
THE TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY