

Jan Niemann, *Chairman*
Emily Lindley, *Commissioner*
Bobby Janecka, *Commissioner*
Toby Baker, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 15, 2021

TO: Persons on the attached mailing list.

RE: City of Junction
TPDES Permit No. WQ0010199001

Decision of the Executive Director.

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any action is taken on this application unless all requests for contested case hearing or reconsideration have been withdrawn before that meeting.

Enclosed with this letter is a copy of the Executive Director's Response to Comments. A copy of the complete application, draft permit and related documents, including public comments, is available for review at the TCEQ Central Office. A copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at the Junction City Hall, 730 Main Street, Junction, 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.



LG/mo

Enclosure

MAILING LIST
for
City of Junction
TPDES Permit No. WQ0010199001

FOR THE APPLICANT:

Garvene Adams, City Secretary
City of Junction
730 Main Street
Junction, Texas 76849

Brice Thomas, Environmental Specialist
LNV, LLC
801 Navigation Boulevard, Suite 300
Corpus Christi, Texas 78408

INTERESTED PERSONS:

See attached list.

FOR THE EXECUTIVE DIRECTOR
via electronic mail:

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

Harrison Cole Malley, Staff Attorney
Texas Commission on Environmental
Quality
Environmental Law Division MC-173
P.O. Box 13087
Austin, Texas 78711-3087

Krishna Lennon Winston, Technical Staff
Texas Commission on Environmental
Quality
Water Quality Division MC-148
P.O. Box 13087
Austin, Texas 78711-3087

FOR PUBLIC INTEREST COUNSEL
via electronic mail:

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

FOR THE CHIEF CLERK
via electronic mail:

Laurie Gharis, Chief Clerk
Texas Commission on Environmental
Quality
Office of Chief Clerk MC-105
P.O. Box 13087
Austin, Texas 78711-3087

TPDES Permit No. WQ0010199001

APPLICATION FROM CITY OF	§	BEFORE THE TEXAS
JUNCTION FOR RENEWAL OF TEXAS	§	
POLLUTANT DISCHARGE	§	COMMISSION ON
ELIMINATION SYSTEM PERMIT NO.	§	
WQ0010199001	§	ENVIRONMENTAL QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director (ED) of the Texas Commission on Environmental Quality (TCEQ) files this Response to Public Comment on City of Junction's application for renewal of Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010199001 and the ED's preliminary decision. As required by title 30, section 55.156 of the Texas Administrative Code (TAC), 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 Bill Neiman and Jan Neiman, Brian Zabcik, Alice Tuckness, Tyson Broad, George Cates, Linda Fawcett, Roybeth Savage, Andrew Burnard and Melissa Burnard, Claire Schultis, Martha Richardson, Sydney Beckner and Texas Parks and Wildlife Department (TPWD). This response addresses all such timely public comments received, whether or not withdrawn. For more information about this permit application or the wastewater permitting process, please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found on the TCEQ's web site at <http://www.tceq.texas.gov>.

I. BACKGROUND

(A) Facility Description

City of Junction has applied to the TCEQ for a renewal permit that would authorize the discharge of treated domestic wastewater via Outfalls 001 at a daily average flow not to exceed 280,000 gallons per day. The City of Junction Wastewater

Treatment Plant (WWTP) is a pond system. Treatment units include bar screen, four facultative and oxidation ponds in series, and a dissolved air flotation (DAF). The facility is in operation.

Effluent limits in the draft permit, based on a thirty-day average, are 30 milligrams per liter (mg/L) five-day biochemical oxygen demand, 90 mg/L total suspended solids, 126 colony-forming units or most probable number of *E. coli* per 100 milliliters, and 4.0 mg/L minimum dissolved oxygen. The effluent shall contain a chlorine residual in the range of 1.0 to 4.0 mg/L after a detention time of at least 20 minutes (based on peak flow). The pH must be in the range of 6.0 to 9.0 standard units.

The WWTF is located approximately 0.4-mile northeast of the intersection of Farm-to-Market Road 2169 and Interstate Highway 10, Junction, in Kimble County, Texas 76849. The treated effluent is discharged directly to Llano River in Segment No. 1415 of the Colorado River Basin. The designated uses for Segment No. 1415 are primary contact recreation, public water supply, and high aquatic life use.

(B) Procedural Background

The TCEQ received the application on June 24, 2020, and declared it administratively complete on September 17, 2020. The Notice of Receipt of Application and Intent to Obtain Water Quality Permit (NORI) was published on October 7, 2020, in the *Junction Eagle*. ED staff completed the technical review of the application on November 16, 2020 and prepared a draft permit. The Notice of Application and Preliminary Decision for TPDES Permit for Municipal Wastewater (NAPD) was published on March 24, 2021, in the *Junction Eagle*. The Notice of Public Meeting for TPDES Permit for Municipal Wastewater was published on July 28, 2021, in the *Junction Eagle*.

The public meeting was held, and the public comment period ended, on August 31, 2021. This application was administratively complete on or after September 1, 2015. Therefore, it is subject to the procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999, and Senate Bill 709, 84th Legislature, 2015.

(C) Access to Rules, Statutes, and Records

- Secretary of State website for all Texas administrative rules:
<http://www.sos.state.tx.us/texreg/index.shtml>
- TCEQ rules in title 30 of the Texas Administrative Code:
<http://www.sos.state.tx.us/tac/index.shtml> (select “View the current *Texas Administrative Code*,” then “Title 30 Environmental Quality”)
- Texas statutes: <https://statutes.capitol.texas.gov/>
- TCEQ website: <http://www.tceq.texas.gov> (for downloadable rules in portable document format, select “Rules and Rulemaking,” then “Download TCEQ Rules”)
- Federal rules in title 40 of the Code of Federal Regulations: <http://www.ecfr.gov>
- Federal environmental laws: <https://www.epa.gov/laws-regulations>

TCEQ records for this application are available at the TCEQ’s Office of the Chief Clerk until the TCEQ takes final action on the application. In light of directives to protect public health, documents can be obtained from the Office of the Chief Clerk by leaving a voice mail at (512) 239-3300; someone will return your call the same day. Some documents located at the Office of the Chief Clerk may also be located in the Commissioners’ Integrated Database at <https://www14.tceq.texas.gov/epic/eCID/>. The application, draft permit, and Statement of Basis/Technical Summary and ED’s Preliminary Decision are also available for viewing and copying at Junction City Hall, 730 Main Street, Junction, Texas.

If you would like to file a complaint about the facility concerning its compliance with provisions of its permit or TCEQ rules, you may call the TCEQ Environmental Complaints Hot Line at 1-888-777-3186 or the TCEQ Region 13 Office directly at 1-210-490-3096. Citizen complaints may also be filed by sending an email to cmplaint@tceq.texas.gov or online at the TCEQ web site (select “Reporting,” then “Make an Environmental Complaint”). If the facility is found to be out of compliance, it may be subject to an enforcement action.

II. COMMENTS AND RESPONSES

Comment 1

George Cates and Tyson Broad expressed concern regarding nuisance odors in the vicinity of the WWTP.

Response 1

Section 309.13(e) of the TCEQ’s Title 30 Texas Administrative Code (30 TAC) rules requires domestic facilities to meet buffer zone requirements for the abatement and control of nuisance odor by complying with one of three options: 1) ownership of the buffer zone area; 2) restrictive easements from the adjacent property owners for any part of the buffer zone not owned by the applicant; or 3) providing nuisance odor control. According to their application, the applicant intends to comply with the requirement to abate and control nuisance odor by ownership of the buffer zone area, i.e., by locating the treatment units at least 150 feet from their property line. This requirement was incorporated into the draft permit at Other Requirement No. 5. Therefore, nuisance odor is not expected to occur as a result of the permitted activities at the facility if the applicants operate the facility in compliance with TCEQ rules and the terms and conditions of the draft permit.

Comment 2

Andrew Burnard, Bill Neiman, Martha Richardson, Linda Fawcett, Brian Zabcik and Sydney Beckner expressed concern about the facility's compliance history and stated the facility performs poorly. They reiterated their concerns about *E. Coli* in the effluent.

Response 2

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

This permit application was received after September 1, 2002, and the company and site have been rated and classified pursuant to 30 TAC Chapter 60. This site has a rating of 10.91 and a classification of satisfactory. The company rating and classification, which is the average of the ratings for all sites the company owns, is 20.27 and satisfactory.

Since the City of Junction has had an administrative order issued in the past five years from the date the application was received, this matter was reviewed by the

TCEQ's Water Quality Division Executive Review Committee. Following feedback from

Executive Director's Response to Public Comment

City of Junction

TPDES Permit No. WQ0010199001

the City of Junction, staff from TCEQ's Region 8 and the Office of Compliance and Enforcement, Other Requirement No. 8 was added to the draft permit. This provision requires the City of Junction to submit quarterly progress reports on the activities completed on the compliance with effluent limitations for Biochemical Oxygen Demand (BOD) and *Escherichia coli* (*E. coli*).

Comment 3

Andrew Burnard, Martha Richardson, Tyson Broad, Melissa Burnard, Bill Neiman, Brian Zabcik, George Cates, and TPWD expressed concern about the lack of nutrient limits in the existing permit. They further raised concerns about limits for nitrogen and phosphorus, requesting nutrient standards and limits be imposed in the permit.

Response 3

The TCEQ does not typically impose nutrient limits on a permit renewal, because an antidegradation review would have been performed when the permit was first issued, or upon any subsequent permit amendments. However, the TCEQ can impose nutrient limits on a permit that is being renewed if it is determined that a discharge is causing excessive algal growth in the waters receiving the discharge. In this case, to obtain a better understanding of the nutrients that are being discharged from this facility, a total phosphorus monitoring requirement is being added to the permit.

Comment 4

Andrew Burnard, Melissa Burnard, Tyson Broad and TPWD expressed concern regarding endangered species in the Llano River.

Response 4

As provided in the *Procedures to Implement the State Surface Water Quality Standards* (June 2010) the Executive Director reviewed the application for potential impacts to aquatic or aquatic-dependent federally listed endangered or threatened species. The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic-dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS's) biological opinion on the State of Texas authorization of the 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 re-evaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Comment 5

Andrew Burnard, Melissa Burnard, Roybeth Savage, Tyson Broad, Martha Richardson, TPWD, Sydney Beckner, Bill Neiman and Jan Neiman commented about the City of Junction using other treatment and disposal options like a Texas Land Application Permit (TLAP).

Response 5

The TCEQ does not have the authority to mandate the method of disposal of treated effluent if the applicant adheres to provisions under TWC Chapter 26 and the rules under 30 TAC Chapters 217, 305, 307 and 309.

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 in 30 TAC § 309.4. If the City of Junction changes the existing method of disposal this would require further review by the 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 and either a TPDES or TLAP permit must be obtained first.

Comment 6

Bill Neiman, Jan Neiman, Sydney Beckner, Tyson Broad, Roybeth Savage, Claire Schultis and TPWD expressed concern about the surface water quality impact on the Llano River and how it could impact the quality of their water supply.

Response 6

The TCEQ is responsible for the protection of water quality with federal regulatory authority over discharges of pollutants to Texas surface water. The TCEQ has a statutory responsibility to protect water quality in the State of Texas and to authorize wastewater discharge TPDES permits under Texas Water Code (TWC) Chapter 26, and regulatory authority 30 TAC Chapters 305, 307 and 309, including specific rules regarding wastewater treatment systems under 30 TAC Chapters 217 and 309.

The proposed draft permit was developed in accordance with the Texas Surface Water Quality Standards to be protective of water quality, provided that the City of Junction 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.

Effluent limitations in the draft permit for the conventional effluent parameters (i.e. BOD₅, TSS, and minimum DO) 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 7

Andrew Burnard, Tyson Broad, Bill Neiman, George Cates, Sydney Beckner and TPWD expressed concern regarding aquatic life and stream recreational uses, including fishing, of the Llano River.

Response 7

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. The effluent limits in the draft permit are set to maintain and protect the existing instream uses.

In this case, the designated uses for Segment No. 1415 are primary contact recreation, public water supply, and high aquatic life use. 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. Additionally, the treated effluent will be disinfected prior to discharge to protect human health.

The ED has made a preliminary determination that the draft permit, if issued, meets all statutory and regulatory requirements.

Comment 8

Andrew Burnard and Tyson Broad commented regarding the color of the water below the facility. Bill and Jan Neiman commented on the impact on ecotourism and the local economy in the areas along the Llano river downstream from the city of junction WWTP.

Response 8

The water quality permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters. The TCEQ does not have the authority to address concerns regarding the impact to tourism in the permitting process. However, 30 TAC 307.4 (b)(5) requires that discharges must not cause substantial and persistent changes from ambient conditions of turbidity or color. Should this be observed as a result of the

discharge, this could result in a violation of the permit.

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

Comment 9

TPWD, Bill Neiman, Sydney Beckner and Roybeth savage expressed concern about algal blooms that may occur because of the City of Junction's WWTP.

Response 9

Phosphorus is a key nutrient necessary for algae growth and is often in limited supply in freshwater systems. By restricting the amount of phosphorus in the treated wastewater, the likelihood of the discharge stimulating excessive growth of algae or other aquatic vegetation is reduced significantly. When ED 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, various factors such as the authorized effluent flow volumes precluded including total phosphorus limits in the draft permit. The water clarity and aquatic vegetation were also examined using aerial imagery and were determined to not warrant total phosphorus limits. Therefore, total phosphorus effluent limits were not recommended for this permit action. However, to obtain a better understanding of the nutrients that are being discharged from this facility, a total phosphorus monitoring requirement is being added to the draft permit.

Comment 10

George Cates, Bill Neiman, Alice Tuckness commented that the draft permit will have/has a negative impact on downstream residents' quality of life and enjoyment of their property. They also raised concerns about the impact the facility will have on local wildlife including aquatic organisms.

Response 10

The draft permit was drafted in accordance with the TSWQS and the Implementation Procedures and should be protective of water quality and uses of the receiving stream, provided the applicant operates and maintains the facility according to the requirements of the draft permit. Human health, surface water and groundwater quality, aquatic and terrestrial wildlife, and the receiving waters' uses will all be protected under the terms of the draft permit.

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

Comment 11

Roybeth Savage asked the for effluent to be treated to drinking water standards.

Response 11

TCEQ's rules do not require that domestic wastewater be treated to potable standards before it is discharged 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.

Comment 12

Bill Neiman expressed concern regarding the use of chlorine for disinfection at the City of Junction WWTP.

Response 12

The rules in 30 TAC § 309.3(g)(1) require that disinfection of domestic wastewater must be protective of both public health and aquatic life, however the rules do not require a specific method of disinfection. A permittee may disinfect domestic wastewater through use of 1) chlorination, 2) ultra-violet light, or 3) an equivalent method of disinfection with prior approval of the Executive Director. For this facility, the City of Junction has chosen a total residence time of at least 21 days. However, the City of Junction has a proposed method of disinfection to use chlorine disinfection. Chlorination may be via gaseous, liquid, or tablet forms. Whichever form is used, the design criteria for chemical disinfection by chlorine, including safety requirements, in 30 TAC Chapter 217, Subchapter K shall be observed.

The Water Quality Division has determined that the draft permit is in accordance with the Texas Surface Water Quality Standards, which ensures that the effluent discharge is protective of aquatic life, human health, and the environment. Therefore, the permit limits given in the draft permit intended to maintain the existing uses of the surface waters and preclude degradation also include the residual chlorine concentration in the treated effluent. The permit limitation for maximum total chlorine residual is 4.0 mg/l to be monitored five times per week upon completion of the chlorine contact chamber.

Comment 13

Bill Neiman raised concerns about the impact the effluent's DO will have on the receiving waters.

Response 13

Discharges of treated wastewater into surface waters of the State of Texas undergo technical reviews to ensure compliance with established water quality criteria for water bodies along the discharge routes of these permits, in accordance with the Texas Surface Water Quality Standards. These technical reviews include an analysis of potential impacts on dissolved oxygen (DO) levels in these water bodies, to ensure that instream DO levels will consistently be maintained at or above the criteria established for these water bodies for the protection of aquatic life.

There are many components in the DO modeling analysis that may impact model results. In regard to the wastewater discharge itself, permits and permit applications are assessed at full-permitted (or proposed) flows and effluent limits under adverse discharge conditions, usually hot and dry, low-flow summertime conditions, which are typically the most pessimistic in regard to dissolved oxygen impacts on a water body. Generally speaking, instream dissolved oxygen concentrations tend to be impacted more significantly by the levels of oxygen-demanding constituents, specifically biochemical oxygen demand (BOD), carbonaceous biochemical oxygen demand (CBOD), and/or ammonia-nitrogen, in a treated wastewater discharge than they are impacted by the DO concentration of the effluent itself. TPDES permits include an 'effluent set' that includes limits on these oxygen-demanding constituents as well as limits on the effluent DO concentration. This permit currently has effluent limits of 30 mg/L five-day biochemical oxygen demand (BOD.)

and 4 mg/L minimum effluent DO. An ammonia-nitrogen concentration of 8 mg/L was used in the modeling analysis, a value that is typical for a discharge from this type of facility unless available information suggests a different value should be used instead.

Other factors that can play a major role in DO model predictions include the amount of ambient baseflow present in a stream or river. In the case of the City of Junction permit, a critical low-flow value (7Q2 flow) was assigned to the Llano River, developed from USGS gage flow data. This critical low flow was calculated to be 70 cubic feet per second (cfs), based on available data from 1986 through 2019. In comparison to that background flow, the existing permit for the City of Junction has a permitted flow of 0.28 MGD, or approximately 0.433 cfs on a daily average basis. The ambient flow in the river during critical low-flow periods is thus calculated to be about 160 times greater than the flow represented by this discharge if the wastewater treatment facility was discharging at its full-permitted flow. Current model results predict a decrease in instream DO concentrations downstream of the City's discharge of approximately 0.01 mg/L at full-permitted flow and effluent limit concentrations. The minimum predicted instream DO concentration is also predicted to be maintained well above the 5.0 mg/L DO criterion established in the Texas Surface Water Quality Standards for the Llano River, classified Segment No. 1415.

The DO modeling analysis is performed under these unfavorable environmental conditions to ensure that aquatic life will be protected not only under conditions such as these, but also during periods when environmental factors are less pessimistic in regard to potential dissolved oxygen impacts, such as when temperatures are cooler or ambient flows are higher.

Comment 14

Andrew Bernard, Tyson Broad, and Sydney Beckner raised concerns about the facility's impact on human health and the environment.

Response 14

The TCEQ is responsible for the protection of water quality with federal regulatory authority over discharges of pollutants to Texas surface water. The TCEQ has a statutory responsibility to protect water quality in the State of Texas and to authorize TPDES permits under Texas Water Code (TWC) Chapter 26 and regulatory authority under 30 TAC Chapters 305, 307 and 309, including specific rules regarding wastewater treatment systems under 30 TAC Chapters 217 and 309. 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.

As specified in the Texas Surface Water Quality Standards (TSWQS), water in the state must be maintained to preclude adverse toxic effects on aquatic life, terrestrial life, livestock, and domestic animals resulting from contact, consumption of aquatic organisms, consumption of water, or any combination of the three. Water in the state must also be maintained to preclude adverse toxic effects on human health resulting from contact recreation, consumption of aquatic organisms, consumption of drinking water, or any combination of the three.

Comment 15

Roybeth Savage expressed concerns regarding how stormwater could affect the facility and the receiving waters.

Response 15

The City of Junction facility is not authorized to discharge greater than 1 MGD, so the facility is not required to have coverage for stormwater discharges.

Comment 16

Roybeth Savage expressed concerns about how well the facility will be able to process personal care products, non-biodegradables, and prescription drugs.

Response 16

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

Accordingly, neither the TCEQ nor the EPA has rules on the treatment of contaminants such as pharmaceuticals in domestic wastewater.

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

The ED has added total phosphorus monitoring requirements to the draft permit in order to get a better understanding of the nutrient concentration and load entering the Llano River from this wastewater facility in response to public comment.

Respectfully submitted,

TEXAS COMMISSION ON ENVIRONMENTAL
QUALITY

Toby Baker
Executive Director

Guy Henry, Acting Deputy Director
Environmental Law Division



Harrison Cole Malley
Staff Attorney
Environmental Law Division
State Bar No. 24116710
P.O. Box 13087, MC 173
Austin, Texas 78711-3087
Phone: (512) 239-1439
Fax: (512) 239-0606
E-mail: Harrison.Malley@tceq.texas.gov

CERTIFICATE OF SERVICE

I certify that on the 14th day of December, 2021, the "Executive Director's Response to Public Comment" for Permit No. WQ0010199001 was filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk.



Harrison Cole Malley, Staff Attorney
Environmental Law Division
State Bar No. 24116710