

State Office of Administrative Hearings

Kristofer S. Monson
Chief Administrative Law Judge

May 5, 2025

David Tuckfield
Attorney for Corix Utilities (Texas) Inc.

VIA EFILE TEXAS

Allie Soileau and Aubrey Pawelka
ED Staff Attorneys

VIA EFILE TEXAS

Pranjal Mehta
OPIC Staff Attorney

VIA EFILE TEXAS

Eric Allmon
Attorney for Environmental Stewardship

VIA EFILE TEXAS

**RE: Docket Number 582-24-22552; Texas Commission on
Environmental Quality No. 2023-1591-MWD; Application of Corix
Utilities (Texas) Inc. for TPDES Permit No. WQ0013977001**

Dear Parties:

Please find attached a Proposal for Decision in this case.

Any party may, within 20 days after the date of issuance of the PFD, file exceptions or briefs. Any replies to exceptions, briefs, or proposed findings of fact shall be filed within 30 days after the date of issuance on the PFD. 30 Tex. Admin. Code § 80.257.

All exceptions, briefs, and replies along with certification of service to the

above parties and the ALJ shall be filed with the Chief Clerk of the TCEQ electronically at <http://www14.tceq.texas.gov/epic/eFiling/> or by filing an original and seven copies with the Chief Clerk of the TCEQ. Failure to provide copies may be grounds for withholding consideration of the pleadings.

CC: Service List

**BEFORE THE
STATE OFFICE OF ADMINISTRATIVE
HEARINGS**

**APPLICATION OF CORIX UTILITIES (TEXAS) INC. FOR
TPDES PERMIT NO. WQ0013977001**

TABLE OF CONTENTS

I.	Notice, Jurisdiction, and Procedural History	2
II.	Burden of Proof.....	4
III.	The Proposed Facility and the Draft Permit	5
IV.	Referred Issues.....	7
V.	Water Quality.....	8
A.	Tier 1 Antidegradation Review	11
1.	Dissolved Oxygen Modeling.....	12
2.	Other Aspects of Tier 1 Antidegradation Review.....	20
B.	Tier 2 Antidegradation Review	23
1.	Environmental Stewardship’s Evidence and Argument.....	23

2. OPIC’s Argument.....	24
3. Applicant’s Evidence and Argument.....	25
4. ED’s Evidence and Argument.....	27
5. ALJ’s Analysis	27
C. Total Phosphorous Limits.....	29
D. Contaminants of Emerging Concern, Including PFAS	31
VI. Other Referred Issues	34
A. Nuisance Odors	34
B. Whether the Application is Accurate and Complete	36
VII. Transcript Costs	36
VIII. Conclusion.....	38

**BEFORE THE
STATE OFFICE OF ADMINISTRATIVE
HEARINGS**

**APPLICATION OF CORIX UTILITIES (TEXAS) INC. FOR
TPDES PERMIT NO. WQ0013977001**

PROPOSAL FOR DECISION

Corix Utilities (Texas) Inc. (Corix) filed an application (Application) with the Texas Commission on Environmental Quality (TCEQ or Commission) for new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0013977001. Corix seeks the permit to discharge a daily average flow not to exceed .051 million gallons of treated domestic wastewater per day during the final phase into an unnamed tributary and then to the Colorado River below Lady Bird Lake/Town Lake in Segment No. 1428 of the Colorado River Basin. The Administrative Law Judge (ALJ) recommends the Application be granted.

I. NOTICE, JURISDICTION, AND PROCEDURAL HISTORY

No party has challenged notice or jurisdiction, which are addressed in the proposed order without further discussion here.

Corix filed the application on July 29, 2022. The Executive Director (ED) of TCEQ declared the application administratively complete on August 31, 2022.¹ The ED determined that the application was technically complete and prepared a draft permit on December 13, 2022.² The Commissioners voted to refer this matter to the State Office of Administrative Hearings (SOAH) on February 7, 2024, and it was docketed with SOAH on July 7, 2024.

A preliminary hearing was held on September 30, 2024, via Zoom videoconference. Corix, the Executive Director (ED) of TCEQ, the Office of Public Interest Counsel (OPIC), and Environmental Stewardship were named as parties.

Corix moved for summary disposition on all the issues referred by the Commission. The ALJ orally granted that motion as to issues B, D, and F at the prehearing conference on January 24, 2025.³

¹ App. Ex. 01-2 at 002.

² App. Ex. 01-2 at 002; Admin. Record Tab C.

³ Environmental Stewardship agreed that summary disposition was appropriate as to Issue B (regionalization and necessity). Environmental Stewardship presented no evidence to rebut the prima facie demonstration regarding the public notice requirements or Corix's compliance history or technical capabilities. Those issues are discussed in the Proposed Order without further discussion in the proposal for decision.

The hearing on the merits was held via Zoom videoconference on January 27-28, 2025, before SOAH ALJ Rebecca S. Smith. Corix was represented by attorney David Tuckfield. Environmental Stewardship was represented by attorney Eric Allmon. The ED was represented by attorneys Allie Soileau and Aubrey Pawelka. OPIC was represented by attorney Pranjal Mehta. The record closed on March 7, 2025, with the filing of response briefs.

Corix presented the testimony of three experts: Paul Price;⁴ Troy Hotchkiss, P.E.;⁵ and Karla Kinser, P.E.⁶ Environmental Stewardship presented the testimony of one of its members, Richard Martin,⁷ and two experts, Dr. Michael MacLeod⁸ and Dr. Lauren Ross.⁹ The ED presented the testimony of aquatic scientist Jenna Lueg,¹⁰ modeler James Michalk,¹¹ and permit coordinator Abdur Rahim.¹²

⁴ Ex. App-01 (Price direct).

⁵ Ex. App-02 (Hotchkiss direct).

⁶ Ex. App-03 (Kinser direct).

⁷ Ex. ES-100 (Martin direct).

⁸ Ex. ES-300 (MacLeod direct).

⁹ Ex. ES-200 (Ross direct).

¹⁰ Ex. ED-JL-1 (Lueg direct).

¹¹ Ex. ED-JM-1 (Michalk direct).

¹² Ex. ED-AR-1 (Rahim direct).

II. BURDEN OF PROOF

The Application was filed after September 1, 2015, and TCEQ referred it under Texas Water Code section 5.556, which governs referral of environmental permitting cases to SOAH upon request. Therefore, this case is subject to Texas Government Code section 2003.047(i-1)-(i-3), which provides:

(i-1) In a contested case regarding a permit application referred under section 5.556 . . . , Water Code, the filing with the office of the application, the draft permit prepared by the executive director of the commission, the preliminary decision issued by the executive director, and other sufficient supporting documentation in the administrative record of the permit application establishes a prima facie demonstration that:

(1) the draft permit meets all state and federal legal and technical requirements; and

(2) a permit, if issued consistent with the draft permit, would protect human health and safety, the environment, and physical property.

(i-2) A party may rebut a demonstration under Subsection (i-1) by presenting evidence that:

(1) relates to . . . an issue included in a list [of issues referred by the Commission] in connection with a matter referred under Section 5.56, Water Code; and

(2) demonstrates that one or more provisions in the draft permit violate a specifically applicable state or federal requirement.

(i-3) If in accordance with Subsection (i-2) a party rebuts a presumption established under Subsection (i-1), the applicant and the executive director may present additional evidence to support the draft permit.

Although this law creates a presumption, sets up a method for rebutting that presumption, and shifts the burden of production on that rebuttal, it does not change the underlying burden of proof. Accordingly, the burden of proof remains with the Applicant to establish by a preponderance of the evidence that the Application would not violate applicable requirements and that a permit, if issued consistent with the draft permit, would protect human health and safety, the environment, and physical property.¹³

In this case, the Application, the Draft Permit, and the other materials listed in Texas Government Code section 2003.047(i-1), were offered and admitted into the record for all purposes.¹⁴

III. THE PROPOSED FACILITY AND THE DRAFT PERMIT

Corix seeks a major amendment to its TPDES Permit No. WQ0013977001 to authorize increasing its discharge of treated domestic wastewater from its currently permitted daily average flow not to exceed 0.05 million gallons per day (MGD) to a daily average flow not to exceed 0.05 MGD in the Interim I phase, 0.25 MGD in the Interim II phase, and 0.51 MGD in the Final phase.¹⁵ The wastewater treatment facility (Facility) is located approximately 1,500 feet northeast of the intersection of Hyatt Lost Pines Road and State Highway 71 West in Bastrop County, Texas.¹⁶ The

¹³ 30 Tex. Admin. Code § 80.17(a), (c).

¹⁴ The Administrative Record (Admin. Record) contains five sections, Tabs A-E.

¹⁵ Admin. Record, Tab C at 0003.

¹⁶ Admin. Record, Tab C at 0004.

treated effluent is discharged to an unnamed tributary, then to the Colorado River below Lady Bird Lake/Town Lake in Segment 1428 of the Colorado River Basin.¹⁷

The Facility is a membrane bio-reactor (MBR) system activated sludge process plant operated in conventional mode. Treatment units in the Interim I phase include a bar screen, an aeration basin, a final clarifier, a sludge digester, a sludge holding tank, and a UV disinfection channel. Treatment units in the Interim II phase will include a primary fine screen, an equalization tank, a secondary fine screen, an anoxic tank, an aeration basin, an aeriated MBR tank, a sludge holding tank, and an ultraviolet light (UV) disinfection system. Treatment units in the Final phase will include a primary fine screen, two equalization tanks, two anoxic tanks, two aeration basins, two aeriated MBR tanks, two secondary fine screens, a sludge holding tank, and a UV disinfection system. The Facility's existing 0.05 MGD phase facilities will be decommissioned and removed upon completion of the Interim II phase facilities.¹⁸

During all three phases, the Draft Permit provides for effluent limitations, based on a 30-day average, of 5 milligrams per liter (mg/L) five-day carbonaceous biochemical oxygen demand (CBOD₅), 5 mg/L total suspended solids (TSS), 2 mg/L ammonia nitrogen (NH₃-N), 1 mg/L total phosphorous (TP), 126 colony-forming units (CFU) or most probable number (MPN) of E. coli per 100 milliliter (ml), and 6.0 mg/L minimum dissolved oxygen (DO). The Draft Permit requires

¹⁷ Admin. Record, Tab C at 0004.

¹⁸ Admin. Record, Tab C at 0003.

Corix to use an ultraviolet light system for disinfection purposes and requires the discharge not to exceed a daily average 126 CFU or MPN of E. coli per 100 ml.¹⁹

The Facility currently serves the McKinney Roughs Learning Center and Cedar Creek High School.²⁰ The expansion is designed to accommodate approximately 2,082 living unit equivalents of mixed use residential and commercial properties.²¹

IV. REFERRED ISSUES

The Commission referred the following issues to SOAH:

- A. Whether the draft permit is protective of water quality, including the protection of the health of the requesters and the requesters' families, the existing uses of the receiving waters, and groundwater in the area in accordance with applicable regulations including the Texas Surface Water Quality Standards in 30 TAC [Texas Administrative Code] Chapter 307;
- B. Whether the Commission should deny or alter the terms and conditions of the draft permit based on consideration of need under [Texas Water Code] § 26.0282 and the general policy to promote regional or area-wide systems under [Texas Water Code] § 26.081;
- C. Whether the draft permit complies with the applicable requirements to abate and control nuisance odors, as set forth in 30 TAC § 309.13(e);

¹⁹ Admin. Record, Tab C 0005.

²⁰ Admin. Record, Tab C at 0003.

²¹ Admin. Record, Tab C at 0003.

- D. Whether Applicant substantially complied with applicable public notice requirements;
- E. Whether the application is accurate and complete; and
- F. Whether the Applicant's compliance history or technical capabilities raise any issues regarding the Applicant's ability to comply with the material terms of the permit that warrant denying or altering the terms of the draft permit.

Corix moved for summary disposition on issues B, D, and F. In response, Environmental Stewardship agreed to summary disposition on issue B (regionalization) but opposed summary disposition on the remaining issues.

V. WATER QUALITY

Most of the parties' focus is on referred issue A—whether the Draft Permit is protective of water quality, including the protection of the health of the requesters and the requesters' families, the existing uses of the receiving waters, and groundwater in the area in accordance with applicable regulations, including the Texas Surface Water Quality Standards in 30 Texas Administrative Code chapter 307.

The Facility's proposed discharge is subject to the Texas Surface Water Quality Standards (TSWQS) found in title 30, chapter 307 of the Texas Administrative Code. The TSWQS identify appropriate uses for the state's surface waters (e.g., aquatic life, recreation, and public water supply), and establish narrative and numerical water quality standards to protect those uses. The TCEQ has standard

procedures for implementing the TSWQS, referred to as the Implementation Procedures (IPs), which are approved by the United States Environmental Protection Agency (EPA).²² The TSWQS and IPs are used in reviewing permit applications.

Generally, TCEQ has not adopted numeric criteria for nutrients in streams and rivers, so they are evaluated based on the general narrative criteria for nutrients and the antidegradation rules. Among those narrative criteria are the requirements that the water be maintained in an aesthetically attractive condition²³ and a prohibition on excessive algal growth that impairs an existing, designated, presumed, or attainable use.²⁴ However, this permit is subject to the Colorado River Watershed rules, which require, among other things, that discharges of treated sewage effluent into the waters of the state in the tributaries of Segment 1428 must, at a minimum, achieve 1 mg/L of phosphorous, based on a 30-day average.²⁵

Under the TSWQS, water in the state must not be acutely toxic to aquatic life, and water in the state with at least limited aquatic life use must not be chronically toxic to aquatic life.²⁶ Acute toxicity is defined as “[t]oxicity that exerts a stimulus severe enough to rapidly induce an effect. The duration of exposure applicable to acute toxicity is typically 96 hours or less. Tests of total toxicity normally use lethality

²² 30 Tex. Admin. Code § 307.2(e).

²³ 30 Tex. Admin. Code § 307.4(b)(4).

²⁴ 30 Tex. Admin. Code § 307.4(e).

²⁵ 30 Tex. Admin. Code § 311.43(a)(4). The Colorado River Watershed rules are found at 30 Texas Administrative Code sections 311.41-.44.

²⁶ 30 Tex. Admin. Code § 307.6(b)(1), (2).

as the measure of acute impacts.”²⁷ Chronic toxicity is defined as “[t]oxicity that continues for a long-term period after exposure to toxic substances. Chronic exposure produces sub-lethal effects, such as growth impairment and reduced reproductive success, but it may also produce lethality. The duration of exposure applicable to the most common chronic toxicity test is seven days or more.”²⁸

The TSWQS also require that proposed wastewater discharges undergo an antidegradation review. Antidegradation review is divided into two tiers. Tier 1 requires that “[e]xisting uses and water quality sufficient to protect those existing uses must be maintained.”²⁹ Tier 2 is more stringent and generally prohibits the lowering of water quality by more than a de minimis amount for waters that exceed fishable/swimmable quality, unless it can be shown that lowering is necessary for important economic or social development.³⁰

Environmental Stewardship challenges the Draft Permit’s protectiveness of water quality in several areas: the Tier 1 and Tier 2 antidegradation reviews, the TSWQS prohibition against toxicity, and the general criteria of the TSWQS including prohibitions on excessive algal growth and requirements that the water be maintained in an aesthetically attractive condition.

²⁷ 30 Tex. Admin. Code § 307.3(a)(1).

²⁸ 30 Tex. Admin. Code § 307.3(a)(13).

²⁹ 30 Tex. Admin. Code § 307.5(b)(1).

³⁰ 30 Tex. Admin. Code § 307.5(b)(2).

A. TIER 1 ANTIDegradation REVIEW

Tier 1 antidegradation review requires existing uses and water quality sufficient to protect those existing uses to be maintained.³¹ “Existing use” is defined as “[a] use that is currently being supported by a specific water body or that was attained on or after November 28, 1975.”³² Currently, Segment 1428 is designated for the following uses: primary contact recreation, exceptional aquatic life use, and public water supply.³³ Exceptional aquatic life use is the highest level of aquatic life use that currently exists in Texas.³⁴

Environmental Stewardship’s argument on Tier 1 antidegradation falls into two main categories—first, a challenge to the dissolved oxygen (DO) modeling that underlies some of the analysis, and then a challenge to the larger-picture antidegradation review. Because of this, this section will begin with a challenge to the DO modeling and analysis and then move to a discussion of the rest of the Tier 1 review.

³¹ 30 Tex. Admin. Code § 307.5(b)(1).

³² 30 Tex. Admin. Code § 307.3(a)(27).

³³ Ex. ED-JL-1 at 4.

³⁴ Ex. ED-JM-1 at 51.

1. Dissolved Oxygen Modeling

DO is the amount of free molecular oxygen dissolved in water and is a primary indicator of the general biologic health of water.³⁵ DO is essential for many forms of aquatic life's survival.³⁶ TCEQ uses a DO model to predict water quality conditions that would occur under various discharge and ambient environmental conditions.³⁷

The initial DO modeling for the application was performed by a TCEQ employee who has since left the agency.³⁸ ED witness James Michalk reviewed the initial modeling and then performed verification and supplemental modeling.³⁹ The QUAL-TX model for the Colorado River was calibrated, but the modeling of the unnamed tributary was in a separate, uncalibrated model.⁴⁰

a) Environmental Stewardship's Evidence and Argument

Environmental Stewardship witness Dr. Lauren Ross testified about what she viewed as several shortcomings with the DO modeling on the Application. Initially, Dr. Ross challenged the ED's staff's decision to use fall temperatures of 24.5° C in the model for Segment 1428, instead of 30.5° C, the temperature that the IPs

³⁵ Ex. ED-JM-1 at 15.

³⁶ Ex. ED-JM-1 at 15.

³⁷ Ex. ED-JM-1 at 15.

³⁸ Ex. ED-JM-1 at 4.

³⁹ Ex. ED-JM-1 at 4.

⁴⁰ Tr. Vol. 1 at 217; Ex. ED-JM-1 at 21.

establish as appropriate.⁴¹ She testified that modeling at lower temperatures resulted in the model overpredicting DO concentrations.⁴²

Dr. Ross also criticized the flow rates used in the DO modeling. She testified that QUAL-TX models must be implemented using critical flow rates.⁴³ She noted that the IPs specify that Segment 1428's critical low flow is 105 cubic feet per second (cfs), but that the two Colorado River QUAL-TX models use flows of 123 cfs and 150 cfs.⁴⁴ She testified that models based on higher stream flows predict higher DO concentrations than models based on lower concentrations.⁴⁵

Dr. Ross also testified that she believed the DO modeling used unrealistic assumptions for the unnamed tributary. In particular, she testified that the modeling used coefficients that would reflect a 23.6-foot-wide stream for the entire length of the tributary. But she testified that the tributary is approximately 12 feet wide. The modeling would thus provide an unrealistically large aeration surface.⁴⁶ She agreed that the hydraulic parameters used followed the TCEQ's procedures for which

⁴¹ Ex. ES-200 at 10 (quoting the IPs as stating "model analyses for effluent limits are usually performed with summer temperatures. The temperature is normally assumed to be 30.5°C unless critical low-flows reliably occur only at other temperatures.").

⁴² Ex. ES-200 at 11.

⁴³ Ex. ES-200 at 11.

⁴⁴ Ex. ES-200 at 11.

⁴⁵ Ex. ES-200 at 11.

⁴⁶ Ex. ES-200 at 12.

hydraulic parameters to use in the absence of other information; she testified that those parameters resulted in a prediction of unrealistic results.⁴⁷

For both the Colorado River and the unnamed tributary, Dr. Ross noted that the ED's DO modeling was a steady-state model that did not account for diurnal swings in DO from respiration and oxygen consumption during sunless periods.⁴⁸

In summary, Environmental Stewardship argues that "the dissolved oxygen modeling fails to demonstrate that the applicable dissolved oxygen standards for the receiving waters have been met"⁴⁹ and that "a Tier 1 review requires that a permit contain effluent limits sufficient to ensure that the dissolved oxygen standards in the receiving waters will not be violated."⁵⁰

Additionally, in its response brief, Environmental Stewardship argues for the first time that the modeling shows that at a flow volume of 150 cfs and 116 cfs, the DO in the Colorado River will be potentially lowered to 5.89 mg/L, which is below the minimum water quality standard of 6.0 mg/L.⁵¹ According to Environmental Stewardship, this failure is enough for the Draft Permit to fail to meet the Tier 1 antidegradation standards.

⁴⁷ Ex. ES-200 at 12.

⁴⁸ Ex. ES-200 at 8-9.

⁴⁹ Environmental Stewardship Closing at 20.

⁵⁰ Environmental Stewardship Response at 5.

⁵¹ Environmental Stewardship Response at 6.

b) Corix's Evidence and Argument

Applicant's witness Paul Price testified that the QUAL-TX modeling demonstrates that the proposed effluent limits will maintain the Segment 1428 DO standards.⁵² He noted that the IPs provide that for modeling, "[t]he temperature is normally assumed to be 30.5°C unless critical low-flows reliably occur only at other temperatures."⁵³ He added that temperature and flow data from Segment 1428 does not exhibit a typical summer low-flow pattern because low flows occur from October to March, when water temperatures are "substantially lower than 30.5°C."⁵⁴ According to Mr. Price, water temperatures in the segment rarely exceed 24°C.⁵⁵

c) ED's Evidence and Argument

Mr. Michalk testified that the modeling was run using October conditions because when the calibrated model of the watershed was developed, that month was determined to be the most critical for the Colorado River.⁵⁶ According to Mr. Michalk, regulated water releases explain why October temperatures are used in modeling this part of the Colorado River:

It is my understanding that when the calibrated model of the Colorado River mainstem was developed, it was determined that the lowest streamflows in the river occur in the non-summer months, and that

⁵² Ex. App-01 at 41.

⁵³ Ex. App-01 at 41 (quoting App-01-3).

⁵⁴ Ex. App-01 at 41.

⁵⁵ Ex. App-01 at 41.

⁵⁶ Ex. ED-JM-1 at 8.

streamflow was the most critical factor in regard to predicted DO impacts. Minimum flows in this portion of the Colorado River are regulated to a substantial degree by releases from the chain of upstream reservoirs to meet obligations for municipal, industrial, and agricultural water needs/water rights downstream of the Austin area and for environmental flow requirements in the river and in the downstream bay system. As the warmest of the applicable ‘non-summer’ months, October was determined to be the most critical month for purposes of DO modeling, so these ‘critical low-flow’ models are set up to simulate October conditions. On the other hand, summertime is generally considered to be the most critical period for DO modeling purposes for tributaries of the Colorado River (whose background flows are not tied to releases from the dams along the Colorado River mainstem), so separate summer models are run for tributaries, with results of ‘winter’ (October) models of the tributaries used as inputs to the Colorado River mainstem models. This critical-case modeling approach has been used for decades in this watershed.⁵⁷

Mr. Michalk also addressed Dr. Ross’s concern about the flow rates used in the modeling. He testified that under Appendix A of the TSWQS, the DO criterion of 6.0 mg/L only applies at “stream flows greater than or equal to 150 cfs as measured at USGS Gauging Station 08158000 located in Travis County upstream from US Highway 183. A dissolved oxygen criterion of 5.0 mg/L applies to stream flows less than 150 cfs and greater than or equal to the [seven-day, two-year low-flow (7Q2)] for the segment.”⁵⁸ He agreed that the Appendix C to the 2010 IPs provide a 7Q2 of 105 cfs, but he also noted that the same IPs provide that the 7Q2 values are generally recalculated annually. At the time of the initial DO review, the recalculated 7Q2 flow

⁵⁷ Ex. ED-JM-1 at 10.

⁵⁸ Ex. ED-JM-1 at 44.

value was 123 cfs.⁵⁹ Before updates, the 7Q2 value was 116 cfs. Currently, the 7Q2 is 122 cfs.⁶⁰

He summarizes the effect of this:

Finally, putting all this information together, there are two different versions of the Colorado River Segment Nos. 1428 and 1434⁶¹ calibrated QUAL-TX model, with different headwater flows, because a 6.0 mg/L DO criterion applies to Segment No. 1428 only when flows recorded at USGS Gage 08158000 are 150 cfs or higher—thus the 150 cfs headwater flow version of the model—and a 5.0 mg/L DO criterion applies when headwater flow are below 150 cfs but are at or above the 7Q2 flow recorded at USGS Gage 08158000, which was 123 cfs at the time of Ms. Robertson’s review—thus the 123 cfs 7Q2 headwater flow version of the model.⁶²

Mr. Michalk agreed with Dr. Ross that the modeling of the unnamed tributary used default hydraulic coefficients that might not match the actual conditions of the stream.⁶³ He testified that those default values, which were derived based on data collected throughout the state, are considered to be a good representation of typical conditions. He testified however, that a few aerial images will not provide sufficient information about flow or velocity of a stream and that depth could only be guessed

⁵⁹ Ex. ED-JM-1 at 44.

⁶⁰ Ex. ED-JM-1 at 45.

⁶¹ The portion of Colorado River Segment 1434 to the State Highway 95 crossing in Smithville was also used in the modeling. Ex. ED-JM-1 at 9. Segment 1428 flows to Segment 1434 approximately 6.7 kilometers downstream of the confluence of the unnamed tributary and the Colorado River. Ex. ED-JM-1 at 17.

⁶² Ex. ED-JM-1 at 45.

⁶³ Ex. ED-JM-1 at 445.

at from aerial images.⁶⁴ He testified that TCEQ would not try to adjust hydraulic coefficients to match an observed width without collecting corresponding depth and velocity or flow information. Nor would TCEQ base coefficients from only one or two stream transect locations.⁶⁵ He added that applicants for TPDES permits are not required to collect stream transect data for intermittent streams.⁶⁶

d) ALJ's Analysis

The ALJ finds Mr. Michalk's testimony about the DO modeling and compliance with the IPs to be credible. Both he and Mr. Price explained the temperature used for the model, and Mr. Michalk explained the source of the critical low flow used in the model. As for the modeling for the unnamed tributary, the evidence shows that while the default assumptions may not match precisely, they are based on established TCEQ standards.

Environmental Stewardship's argument that the DO modeling shows a potential lowering of DO below the criterion was raised for the first time in its reply brief, so the other parties have not responded to it. It argues that the modeling:

shows that at a flow volume of 150 cfs, the dissolved oxygen concentration in the Colorado River will be potentially lowered to 5.89 mg/L as a consequence of the discharge. Similarly, the same modeling shows that at a flow volume of 116 cfs, the dissolved oxygen

⁶⁴ Ex. ED-JM-1 at 45-46.

⁶⁵ Ex. ED-JM-1 at 46.

⁶⁶ Ex. ED-JM-1 at 46.

concentration will be potentially lowered to a value of 5.89 mg/L as a result of the discharge.⁶⁷

The citation Environmental Stewardship provides for the result at 150 cfs is ED-JM-18 at page 542, element 86.⁶⁸ ED-JM-18 is the QUAL-TX output file for 150 cfs. Environmental Stewardship presented no testimony about this file, about how to interpret it, or what the numbers contained within it mean. Because this issue was not discussed during the hearing, there is no evidence in the record addressing whether element 86 is upstream or downstream of the discharge.⁶⁹ Regardless, ED-JM-18 at page 542, element 86 shows a DO of 5.96 mg/L. The only other listing of a DO below 6.0 in that chart is element 87, showing a DO of 5.99 mg/L. Both numbers reasonably round up to 6.0 mg/L.

Environmental Stewardship's second cite is to ED-JM-16 at page 466, also for element 86. ED-JM-16 is the QUAL-TX output file for the 7Q2 (or critical low flow) scenario, and unlike with ED-JM-18, element 86 does show a DO of 5.89 mg/L. But the DO criterion for Segment 1428 for flows less than 150 cfs—such as the 116 cfs modeled in ED-JM-16—is 5.0 mg/L.⁷⁰ 5.89 mg/L exceeds that amount. The ALJ thus finds Environmental Stewardship's argument unpersuasive.

⁶⁷ Environmental Stewardship Response at 6 (citations omitted).

⁶⁸ Environmental Stewardship Response at 6 n.4.

⁶⁹ See ED-JM-16 at 454; ED-JM-18 at 530 (element 86 is the ending element of reach 25, km 439.5 to km 436.5). See also Ex. ED-JM-8 at 2 (“unnamed tributary enters Segment 1428 at model element 148”).

⁷⁰ Ex. ED-JM-1 at 44; Ex. ED-JM-6 at 1.

In sum, the evidence shows that the DO modeling was correctly performed and that the proposed discharge allowed by the Draft Permit will not result in a lowering of DO in the receiving waters such that the waters are likely to not meet the DO criterion.

2. Other Aspects of Tier 1 Antidegradation Review

Environmental Stewardship also contends that the discharge will contribute to algal blooms, which can interfere with contact recreation and exceptional aquatic life use.

a) Environmental Stewardship's Evidence and Argument

At hearing, Environmental Stewardship offered into evidence some recent photographs showing algae around the confluence of the unnamed tributary and the Colorado River and then approximately 200 yards farther downstream.⁷¹ The first of those photographs shows some algal bloom and a disposable cup. The second photograph shows a shallower area with signs of algae. In closing, Environmental Stewardship also pointed to an aquatic life monitoring study performed by the Lower Colorado River Authority (LCRA) showing in July 2024 that the fish presence only reflected high aquatic life uses, while habitat characteristics indicated intermediate aquatic life uses.⁷²

⁷¹ Ex. ES-1.

⁷² Environmental Stewardship Closing at 14 (citing Ex. App.-01-9 at 14).

Based on this photograph and the LCRA study, Environmental Stewardship argues that “the receiving waters already show signs of falling short of [the designated] use and are already listed as of concern with regard to fish communities and nutrients in the receiving waters” and that adding nutrients “will potentially cause algal blooms which impede recreation, depress night-time oxygen concentrations, and stress or kill organisms that are oxygen dependent.”⁷³

b) Corix’s Evidence and Argument

Corix witness Mr. Price testified that patches of algae are not uncommon in Texas rivers.⁷⁴ He also testified that the presence of algae is not consistent:

visible algal growth, either as submerged masses or floating mats[,] tend to be dispersed in a riverine environment, occurring as patches reflecting the varying suitable physical habitat available for noticeable growth to accumulate. Regardless of whether there is more algae in the river now than 50 years ago, the presence of visible algae mats will vary widely with location, season, [and] occurrence of periods high or of very low flows.⁷⁵

Mr. Price also testified that “[d]espite nutrient concerns, the reach of the Colorado River below Longhorn Dam in Austin continues to exhibit Exceptional Aquatic Life Uses.”⁷⁶ Applicant argues that any anecdotal observations about the

⁷³ Environmental Stewardship Closing at 20.

⁷⁴ Tr. Vol. 1 at 80.

⁷⁵ Ex. APP-01 at 21.

⁷⁶ Ex. App-01 at 33.

Colorado River do not suggest that the Draft Permit violates a specifically applicable state or federal legal or technical requirement.⁷⁷

c) ED's Evidence and Argument

ED witness Jenna Lueg performed the Tier 1 antidegradation review based on the IPs and in the same manner that she has performed other reviews.⁷⁸ She testified that the designated uses for Segment 1428 are primary contact recreation, exceptional aquatic life use, and public water supply.⁷⁹ Intermittent streams, such as the unnamed tributary, are given a minimal aquatic life use.⁸⁰ She drafted two memoranda to document her antidegradation reviews and completed a worksheet.⁸¹ She testified that she does not believe the discharge allowed under the Draft Permit would interfere with existing uses. She also testified that Segment 1428 is not listed as impaired in either the 2022 or 2024 Texas Integrated Report of Surface Water Quality.⁸²

d) ALJ's Analysis

The administrative record creates the prima facie demonstration that the Draft Permit satisfies the requirements. Although Corix retains the ultimate burden of

⁷⁷ App. Closing at 6.

⁷⁸ Ex. ED-JL-1 at 5-7.

⁷⁹ Ex. ED-JL-1 at 4.

⁸⁰ Ex. ED-JL-1 at 5.

⁸¹ Ex. ED-JL-4.

⁸² Ex. ED-JL-1 at 4.

proof, two photographs of algal growth in water that is not on the state’s inventory of impaired water is not sufficient to rebut the presumption that based on the Tier 1 antidegradation review, existing uses will be protected.

B. TIER 2 ANTIDEGRADATION REVIEW

Under Tier 2 antidegradation review, a permit cannot allow activities that would cause degradation of waters that exceed fishable/swimmable quality unless it can be shown that the lowering of water quality is necessary for important or social development.⁸³ Degradation is defined as “a lowering of water quality by more than a de minimis extent, but not to the extent that an existing use is impaired.”⁸⁴

1. Environmental Stewardship’s Evidence and Argument

Environmental Stewardship argues that the Tier 2 evaluation of the Application was faulty because it did not use the correct baseline. Environmental Stewardship argues that it presented evidence that the ambient waters of the Colorado River have degraded since November 28, 1975, and that because “the quality of the receiving water as a result of the discharge will be even worse,” a full showing of social or economic necessity must be made.⁸⁵ Because there is no evidence of social or economic necessity, Environmental Stewardship argues, the Tier 2 requirements have not been met.

⁸³ 30 Tex. Admin. Code § 307.5(b)(2). “Fishable/swimmable” waters are defined as “waters that have quality sufficient to support propagation of indigenous fish, shellfish, terrestrial life, and recreation in and on the water.” *Id.*

⁸⁴ 30 Tex. Admin. Code § 307.5(b)(2).

⁸⁵ Environmental Stewardship Closing at 21.

As evidence, Environmental Stewardship presented Dr. Ross’s testimony that the water quality of the Colorado River has degraded over time. Witness Richard Martin also testified that he has observed a major decline of fish population and increase in algae in the Colorado River between Webberville and Bastrop over the last 50 years.⁸⁶ Environmental Stewardship introduced a 2023 LCRA report noting that there were significant trends in increasing concentrations of chloride, total suspended solids, and chlorophyll-*a* at a sampling location shortly upstream of the area of the Colorado River that would receive the increased discharge.⁸⁷ Dr. Ross testified that given increases, “[t]here has been no demonstration that the discharge that would be authorized by the draft permit would not result in lowering receiving water quality” for chlorides, sulfates, and total dissolved solids “by more than a de minimis extent.”⁸⁸

2. OPIC’s Argument

OPIC argues that longstanding concerns about nutrient concentration and declining water quality in Segment 1428 need to be considered in the Tier 2 antidegradation review.⁸⁹

⁸⁶ Ex. ES-100 at 4-5.

⁸⁷ Ex. ES-3 at 8, 12.

⁸⁸ Ex. ES-200 at 24-25.

⁸⁹ OPIC’s Closing at 8-9.

3. Corix's Evidence and Argument

Mr. Price testified that the Texas 303(d) list, also known as Texas's inventory of impaired and threatened waters "defines impaired segments as waters in or bordering the State for which effluent limitations are not stringent enough to achieve water quality standards."⁹⁰ Segment 1428 is not currently on that list. He agreed that Segment 1428 is on the 2024 Texas Integrated Reports list for potential sources of impairments and concern and for water bodies with concern for use attainment and screening levels. He added that there has been a 20-year concern regarding low fish and macroinvertebrate community scores, but noted that the fish and macroinvertebrate data has not been updated since the early 2000s. He also testified that there has been a long-term concern with nutrients, specifically nitrate and TP, but that other parameters are of no concern in the Texas Integrated Report.⁹¹ In particular, he testified that there is no concern for DO or chlorophyll *a*. He noted that the Surface Water Quality Monitoring database⁹² only rarely shows chlorophyll *a* concentration above 0.005 mg/L, whereas the screening criterion for chlorophyll *a* in the Texas Integrated Report is 0.0141mg/L.⁹³ He also testified that impairment means more than just presence.⁹⁴

⁹⁰ Ex. App-01 at 19.

⁹¹ Ex. APP-01 at 19.

⁹² The Surface Water Quality Monitoring (SWQM) database is the product of a program that coordinates the collection of physical, chemical, and biological samples from statewide surface water sites. Ex. APP-01 at 27.

⁹³ Ex. APP-01 at 23; *see also* Ex. APP-01 at 32 ("The SWQM data for Station 12466 shows DO concentrations to be consistently meeting Segment Standards, and chlorophyll *a* values are not of concern.").

⁹⁴ Ex. APP-01 at 32.

In short, Mr. Price testified that he did not believe that the proposed discharge under the Draft Permit would result in any significant—or even detectable—change to water quality because the discharge point is greater than a mile away from the Colorado River; and because as the effluent travels down the unnamed tributary, physical, chemical, and biological processes will act to metabolize oxygen-demanding materials, sequester phosphorous as insoluble compounds in the creek sediment, and metabolize nitrate reduction to nitrogen gas.⁹⁵ He also testified that “the large flows in the Colorado River compared to the proposed ... maximum flow [under the Draft Permit] will result in the extreme dilution of dissolved substances in the effluent.”⁹⁶ He added that this dilution “will result in only small changes in the material loads (and concentrations) discussed by Dr. Ross, and their presumed consequent effects on the biota of the Colorado River.”⁹⁷

Mr. Price testified that he believed the ED’s staff appropriately considered requirements and criteria, followed the IPs, and made appropriate recommendations in the Draft Permit.⁹⁸

⁹⁵ Ex. APP-01 at 24.

⁹⁶ Ex. APP-01 at 24. Mr. Price also testified that Environmental Stewardship commented on the draft 2024 list and requested that Segment 1428 be added to Texas 303(d) list but that TCEQ rejected that request. Ex. APP-01 at 30.

⁹⁷ Ex. APP-01 at 42.

⁹⁸ Ex. APP-01 at 20.

4. ED's Evidence and Argument

In response to Dr. Ross's testimony about the degradation of the Colorado River, Ms. Lueg testified that "to get a proper and adequate baseline we would have to go back in time and conduct studies. What we know about the baseline is the data we have on existing conditions."⁹⁹ Similarly, she added "[t]here is no other way to know if ambient conditions have been degraded [since November 28, 1975], so we must base it off existing conditions or current information we have."¹⁰⁰

The ED argues that, under the IPs, baseline conditions, as indicated by the latest edition of the Texas Water Quality Inventory or other available information, are used.¹⁰¹ According to the ED, Environmental Stewardship did not present any evidence that these baselines were not used. The ED also argued that Environmental Stewardship did not present any evidence that any degradation was caused by Corix's discharge.¹⁰²

5. ALJ's Analysis

Although Environmental Stewardship argues that it has shown a degradation of water since November 28, 1975, it has not presented evidence that the proposed discharge will contribute more than a de minimis amount to that degradation. Nor

⁹⁹ Ex. ED-JL-1 at 17.

¹⁰⁰ Ex. ED-JL-1 at 18.

¹⁰¹ ED Reply at 5.

¹⁰² ED Closing at 5.

has it shown what that baseline was. Instead, Environmental Stewardship argues that there has been no demonstration that the discharge would not lower the receiving water quality by more than a de minimis extent. But that is not the burden in this case. The administrative record has made that initial showing.¹⁰³ Given the prima facie demonstration, Environmental Stewardship needed to present evidence demonstrating that one or more provisions in the draft permit violate a specifically applicable state or federal requirement.¹⁰⁴ In addition to Dr. Ross's testimony that Corix has failed to make a showing, Environmental Stewardship elicited testimony from Mr. Price that discharge under the Draft Permit would contain suspended solids, sulfate, and chloride.¹⁰⁵ But that testimony is not evidence that discharge will cause more than de minimis degradation. What's more, both Mr. Price and Ms. Lueg testified that, given the small amount of discharge anticipated from the Facility when compared to the amount of water in the Colorado River, the discharge is expected to have minimal effect.¹⁰⁶

After the parties filed their briefs in this matter, the Texas Supreme Court issued its opinion in *Save Our Springs Alliance, Inc. v. Texas Commission on Environmental Quality*.¹⁰⁷ In that opinion, the court held that an antidegradation analysis does not focus on an individual parameter change and stated "Tier 2's text

¹⁰³ Tex. Gov't Code § 2003.047(i-1).

¹⁰⁴ Tex. Gov't Code § 2003.047(i-2).

¹⁰⁵ Tr. Vol. 1 at 120-21.

¹⁰⁶ Ex. APP-01 at 24; Ex. ED-JL-1 at 16.

¹⁰⁷ No. 23-0282, 2025 WL 1085176 (April 11, 2025).

is clear: degradation is a ‘lowering of water quality,’ not a ‘lowering of water-quality parameters’ or ‘water-quality components’ or ‘water-quality constituents.’”¹⁰⁸ Thus, the fact that there would be an increase in a parameter is not, by itself, a showing of degradation.

C. TOTAL PHOSPHOROUS LIMITS

Environmental Stewardship alternatively argues that the Draft Permit, if issued, should include a TP limit of 0.02 mg/L.¹⁰⁹ The discharge is subject to the Colorado River Watershed rules, which provide for a TP limit of 1 mg/L, based on a 30-day average.¹¹⁰ The Draft Permit contains that same TP limit of 1 mg/L.

Environmental Stewardship first contends that the ED’s staff erred in conducting its nutrient screening.¹¹¹ It points out that the nutrient screening is based on scoring ten factors as low, moderate, or high. It then cites the IPs, which provide that “[a]n effluent limit for TP is probably needed when a substantial number of screening factors are rated moderate and high.”¹¹² Seven of the ten factors were ranked as being either moderate or high. Three were ranked low, a ranking with which

¹⁰⁸ *Save Our Springs Alliance, Inc.*, 2025 WL 1085176 at *10.

¹⁰⁹ Environmental Stewardship Closing at 23. Environmental Stewardship also seems to suggest that a violation of TP limits would, by itself, constitute degradation.

¹¹⁰ 30 Tex. Admin. Code § 311.43(a)(4).

¹¹¹ Environmental Stewardship Closing at 16-17.

¹¹² Ex. ED-JL-3 at 52.

Dr. Ross disagreed. Nevertheless, a TP limit of 1.0 mg/L was included in the Draft Permit.

Dr. Ross testified that this TP limit is insufficient, contending that independent of the Colorado River Watershed rules, under the June 2010 IPs, “when screening indicates that a reduction of effluent TP is needed, an effluent limit is recommended based on reasonably available technology-based limits, with consideration of the sensitivity of the site.”¹¹³ She testified that two other permits, for the City of Dripping Springs and for the City of Liberty Hill, have considerably lower TP effluent limits, showing that lower limits are possible. Dr. Ross specifically testified that a limit of 0.15 mg/L would be consistent with the membrane bioreactor technology Corix intends to use, making it a reasonable limit.¹¹⁴

Ms. Lueg testified that based on her review, a TP limit of 1.0 mg/L will be protective.¹¹⁵ She added that one factor in this decision is that the Facility has a relatively low volume in comparison to the total flow of the Colorado River.¹¹⁶ She also noted that Segments 1428 and 1434 of the Colorado River are not listed as out of

¹¹³ Environmental Stewardship Ex. 200 at 16.

¹¹⁴ Tr. Vol. 1 at 40-41.

¹¹⁵ Ex. ED-JL-1 at 15.

¹¹⁶ Ex. ED-JL-1 at 16.

compliance in the Integrated Report.¹¹⁷ She added that TCEQ has not seen evidence of excessive attached algae in this stretch of the Colorado River.¹¹⁸

The ALJ finds that the nutrient screening was appropriately conducted. Although Dr. Ross testified that a TP limit of 0.15 mg/L was possible, she did not show that discharges under the Draft Permit, with a TP limit of 1.0 mg/L, would violate TSWQS or any other rule. Accordingly, there is no basis for rebutting the presumption that the Draft Permit is protective.

D. CONTAMINANTS OF EMERGING CONCERN, INCLUDING PFAS

Dr. Ross testified that she expected to see contaminants of emerging concern (CEC), including per- and polyfluoroalkyl substances (PFAS), in Corix's discharge.¹¹⁹ She described CECs as including "persistent organic chemicals like those used in flame retardants and plastics, drugs prescribed for human- and veterinary use like antidepressants, blood pressure modifiers, ibuprofen, bactericides, antimicrobials, antibiotics, anti-fungals, synthetic and naturally occurring estrogens, and nano-scale carbon and titanium dioxide materials."¹²⁰ As for PFAS, Dr. Ross testified that in April 2024, EPA "established enforceable primary drinking water Maximum Contaminant Levels at concentrations of 4 to 10

¹¹⁷ Ex. ED-JL-1 at 16.

¹¹⁸ Ex. ED-JL-1 at 17.

¹¹⁹ Ex. ES-200 at 18-19.

¹²⁰ Ex. ES-200 at 17.

nanograms per liter for a subset of these compounds.”¹²¹ In its Closing (not in testimony), Environmental Stewardship indicated what this subset consists of by providing the levels for perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), and potassium perfluorobutane sulfonate.¹²² Dr. Ross also discussed a memorandum by a toxicologist that she said is worth considering.¹²³ In this memorandum, Dr. Jodon Crago, who was not a witness and was not available for cross examination, gave his opinion on the Application and noted possible effects of chronic exposure to PFOS and PFOA on amphibians.¹²⁴

The ED’s witness Mr. Rahim testified about the absence of rules governing CECs and PFAS in wastewater:

Neither the TCEQ nor the EPA has promulgated rules or criteria limiting emerging contaminants in wastewater. Removal of some emerging contaminants has been documented during municipal wastewater treatment; however, standard removal efficiencies have not been established. In addition, there are currently no federal or state effluent limits for emerging contaminants. So, while the EPA and other agencies continue to study the presence of PFAS, there is currently no clear regulatory regime available to address the treatment of PFAS in domestic wastewater.¹²⁵

¹²¹ Ex. ES-200 at 19.

¹²² Environmental Stewardship Closing at 11.

¹²³ Ex. ES-200 at 25-26.

¹²⁴ Ex. ES-213.

¹²⁵ Ex. ED-AR-1 at 7. *See also* Ex ED-JL-1 at 19 (testifying that there are currently no state or federal effluent limits for emerging contaminants).

The Commissioners have previously determined that the Commission does not regulate CECs in the TPDES program as a matter of law, which makes CECs not a relevant and material issue.¹²⁶ Environmental Stewardship argues that the Commission’s determination that CECs are irrelevant is an ad hoc rulemaking, and that a formal rulemaking is required.¹²⁷ It also argues that the policy or rule would be contrary to 30 Texas Administrative Code section 305.531(4), which requires that a permit include limiting parameters for toxic pollutants when necessary to meet the TSWQS. It continues: “No party disputes that CECs, and particularly PFAS, are toxic. Nor does any party dispute that the TCEQ water quality standards require that State waters be maintained in a state that is not toxic to humans or wildlife.”¹²⁸

While potential toxicity may not be disputed, just stating that CECs, and particularly PFAS, are toxic is not enough to rebut the presumption. Acute toxicity and chronic toxicity have meanings set out in the Commission’s rules, and while Environmental Stewardship mentioned Dr. Crago’s memorandum, it did not attempt to show that any CECs or PFAS in the discharge would meet either the definition of chronic or acute toxicity. In other words, they did not show that the Draft Permit would violate a specifically applicable state or federal requirement. In fact, they did not show that the specific PFAS discussed in the memorandum—PFOS and

¹²⁶ *Application by Highland Lakes Midlothian I, LLC for New TPDES Permit No. WQ0015999001*, TCEQ Docket No. 2023-0844-MWD, SOAH Docket No. 582-23-23818, Final Order (August 5, 2024).

¹²⁷ Environmental Stewardship Response at 12-13.

¹²⁸ Environmental Stewardship Response at 13.

PFOA—would be present in the discharge.¹²⁹ Nor is Environmental Stewardship able to avoid the Commissioner’s decision by phrasing the issue in terms of toxicity. Environmental Stewardship did not rebut the presumption on this issue.

VI. OTHER REFERRED ISSUES

The remaining referred issues are nuisance odors and the Application’s accuracy and completeness.

A. NUISANCE ODORS

The TCEQ rule found at 30 Texas Administrative Code section 309.13(e) provides three alternative ways to meet the requirement to abate and control nuisance odor “prior to construction.” The three methods are buffer zones from the nearest property line (500 feet for lagoons with anaerobic activity; 150 feet for all other wastewater treatment plant units); a nuisance odor prevention request in the form of an engineering report containing specific elements; or evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the applicant.¹³⁰ The rule provides that a nuisance odor prevention plan may be submitted either with a permit application or “submitted for [ED] approval after the permitting process is completed.”¹³¹

¹²⁹ Corix argues that neither PFOS nor PFOA have been used in United States manufacturing since 2015 and thus would not be expected to be present in the discharge. Corix Reply at 10.

¹³⁰ 30 Tex. Admin. Code § 309.13(e).

¹³¹ 30 Tex. Admin. Code § 309.13(e)(2).

Environmental Stewardship argues that the Draft Permit fails to comply with this rule. It contends that units with zones of anaerobic activity will be located within fewer than 500 feet of the nearest property line; that Corix has not submitted an odor prevention request; and that Corix has not shown evidence of legal restrictions prohibiting residential structures within the part of the buffer zone it does not own.¹³² It also asserts that any submission of a plan after permit issuance would improperly deprive the public of its opportunity to evaluate and provide input on the plan.

Environmental Stewardship did not present any testimony on this issue. Corix witness Ms. Kinser testified that the Draft Permit requires Corix to have secured TCEQ approval of its odor prevention plan before it begins operation.¹³³ ED witness Mr. Rahim testified that the plan would be reviewed by TCEQ after a permit is issued.¹³⁴

Corix's argument on this issue is based on this idea, as well: that the Draft Permit requires compliance with 30 Texas Administrative Code section 309.13(e). The ED adds to this argument by contending that nothing in the statute or rules requires the public to be allowed to comment on an odor control plan.¹³⁵ OPIC agrees that Corix met its burden of proof on this issue.

¹³² Environmental Stewardship Closing at 23.

¹³³ Ex. App-03 at 9.

¹³⁴ Tr. at 254.

¹³⁵ ED Closing at 5-6; ED Reply at 6.

The ALJ agrees with Corix, the ED, and OPIC. The referred issue was whether the Draft Permit complies with the odor abatement and control requirements set out in 30 Texas Administrative Code section 309.13(e). That rule expressly provides that review of an odor prevention plan may occur after a permit is issued, and the Draft Permit requires Corix to obtain approval of a plan before it can begin operation. Environmental Stewardship has not presented any basis to find that the presumption has been rebutted on this issue.

B. WHETHER THE APPLICATION IS ACCURATE AND COMPLETE

Environmental Stewardship contends the Application is incomplete because it does not contain a demonstration of social or economic necessity, as required by a Tier 2 antidegradation review that finds degradation of waters that exceed fishable/swimmable quality.¹³⁶ For the reasons set out above, degradation was not found, and therefore this was unnecessary.

VII. TRANSCRIPT COSTS

The Commission may assess reporting and transcription costs to one or more of the parties participating in a proceeding, and when doing so, must consider the following factors:

- the party who requested the transcript;
- the financial ability of the party to pay the costs;
- the extent to which the party participated in the hearing;

¹³⁶ Environmental Stewardship Closing at 24.

- the relative benefits to the various parties of having a transcript; . . . and
- any other factor which is relevant to a just and reasonable assessment of costs.¹³⁷

Additionally, the Commission will not assess reporting or transcription costs against the ED or OPIC because they are statutory parties who are precluded by law from appealing the Commission's decision.¹³⁸

Environmental Stewardship argues that Corix should bear all transcript costs except for those associated with its offer of proof. Corix argues that the transcript costs of \$5,437.75 should be split so that it and Environmental Stewardship each pay half.

Considering the Commission's factors, the ALJ finds that the transcript was ordered by the ALJ, not requested by either party and that no party has claimed a financial inability to pay transcript costs. The parties all participated in the hearing and all benefitted equally from having the transcript, except that only Environmental Stewardship benefitted from the transcript of the offer of proof. Given that, the ALJ finds that an appropriate division of the transcript costs are 75% (or \$4,078.31) to Corix and 25% (or \$1,359.44) to Environmental Stewardship.

¹³⁷ 30 Tex. Admin. Code § 80.23(d)(1).

¹³⁸ 30 Tex. Admin. Code § 80.23(d)(2); *see* Tex. Water Code §§ 5.228, .273, .275, .356.

VIII. CONCLUSION

For the reasons stated above, the Application should be granted. In further support of this recommendation, the ALJ has prepared the Findings of Fact and Conclusions of Law incorporated within the accompanying proposed Order of the Commission.

Signed May 5, 2025

ALJ Signature:

A handwritten signature in cursive script that reads "Rebecca S. Smith". The signature is written in dark ink and is positioned above a horizontal line.

Rebecca Smith

Presiding Administrative Law Judge

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AN ORDER GRANTING THE APPLICATION BY CORIX UTILITIES (TEXAS) INC. FOR TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NO. WQ0013977001 SOAH DOCKET NO. 582-24-22552, TCEQ DOCKET NO. 2023-1591-MWD

On _____, the Texas Commission on Environmental Quality (TCEQ or Commission) considered the application of Corix Utilities (Texas) Inc. (Applicant) for Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0013977001 in Bastrop County, Texas. A Proposal for Decision (PFD) was presented by Administrative Law Judge (ALJ) Rebecca S. Smith with the State Office of Administrative Hearings (SOAH), who conducted an evidentiary hearing concerning the application on January 27-28, 2025, via Zoom videoconference.

After considering the PFD, the Commission makes the following findings of fact and conclusions of law.

I. FINDINGS OF FACT

1. Applicant filed its application (Application) for a major amendment to its TPDES permit with the TCEQ on July 29, 2022.
2. The application seeks to have TCEQ authorize an increase in the discharge of treated domestic wastewater from a daily average flow not to exceed 0.05 million gallons per day (MGD) to a daily average flow not to exceed 0.51 MGD.

3. On August 31, 2022, TCEQ Executive Director (ED) staff determined that the Application was administratively complete.
4. ED staff completed the technical review of the Application, prepared a draft permit (Draft Permit), and made it available for public review and comment.

The Plant

5. The plant site is located approximately 1,500 feet northeast of the intersection of Hyatt Lost Pines Road and State Highway 71 West, in Bastrop County, Texas 78612.
6. The existing McKinney Roughs Wastewater Treatment Facility is an activated sludge process plant operated in conventional mode.
7. Treatment units in the existing phase include a bar screen, an aeration basin, a final clarifier, a sludge digester, a sludge holding tank, and an ultraviolet light (UV) disinfection channel.
8. The proposed treatment facility will be a membrane bio-reactor (MBR) system activated sludge process plant operated in conventional mode.
9. Treatment units in the Interim II phase will include a primary fine screen, an equalization tank, a secondary fine screen, an anoxic tank, an aeration basin, an aeriated MBR tank, a sludge holding tank, and a UV disinfection system.
10. Treatment units in the Final phase will include a primary fine screen, two equalization tanks, two anoxic tanks, two aeration basins, two aeriated MBR tanks, two secondary fine screens, a sludge holding tank, and a UV disinfection system.
11. The facility is currently operating in the existing 0.05 MGD phase.
12. The existing 0.05 MGD phase facilities will be decommissioned and removed upon completion of the Interim II phase facilities.

The Draft Permit

13. The permit will authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 0.05 MGD in the Interim I phase, 0.25 MGD in the Interim II phase, and 0.51 MGD in the Final phase.
14. The existing wastewater treatment facility serves the McKinney Roughs Learning Center and the Bastrop ISD Cedar Creek High School. The service area increase is intended to accommodate approximately 2,082 living unit equivalents of mixed use residential and commercial properties.
15. The effluent limitations in the draft permit, based on a 30 day average, are 5 milligrams per liter (mg/L) five-day carbonaceous biochemical oxygen demand (CBOD5), 5 mg/L total suspended solids (TSS), 2 mg/l ammonia nitrogen (NH3-N), 1.0 mg/L Total Phosphorous (TP), 126 colony-forming units (CFU) or most probable number (MPN) of *Escherichia coli* (*E. coli*) per 100 milliliter (ml), and 6.0 mg/L minimum dissolved oxygen (DO).
16. The Draft Permit requires use of a UV system for disinfection purposes, and treated effluent shall not exceed a daily average 126 CFU or MPN of *E. coli* per 100 ml.
17. The treated effluent will be discharged to an unnamed tributary, then to the Colorado River Below Lady Bird Lake/Town Lake in Segment No. 1428 of the Colorado River Basin.
18. The unclassified receiving water use is minimal aquatic life use for the unnamed tributary.
19. The designated uses for Segment No. 1428 are primary contact recreation, public water supply, and exceptional aquatic life use.

Notice and Jurisdiction

20. The Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) was published in English in the *Austin American Statesman* on September 13, 2022.

21. The Notice of Application and Preliminary Decision (NAPD) was published in English in *Bastrop Advertiser* on February 10, 2023.
22. The public meeting notice was published in English in *Bastrop Advertiser* on April 26, 2023.
23. A public meeting was held on June 1, 2023, which was the end of the public comment period.
24. TCEQ granted Environmental Stewardship's (Protestant) request for a contested case hearing at its February 7, 2024 open meeting and issued an Interim Order on February 13, 2024, directing that the following six issues be referred to SOAH, and setting the maximum duration date of the hearing at 180 days from the date of the preliminary hearing until the date the proposal for decision is issued by SOAH:
 - A. Whether the draft permit is protective of water quality, including the protection of the health of the requesters and the requesters' families, the existing uses of the receiving waters, and groundwater in the area in accordance with applicable regulations including the Texas Surface Water Quality Standards in 30 Texas Administrative Code chapter 307;
 - B. Whether the Commission should deny or alter the terms and conditions of the draft permit based on consideration of need under Texas Water Code section 26.0282 and the general policy to promote regional or area-wide systems under Texas Water Code section 26.081;
 - C. Whether the draft permit complies with the applicable requirements to abate and control nuisance odors, as set forth in 30 Texas Administrative code section 309.13(e);
 - D. Whether Applicant substantially complied with applicable public notice requirements;
 - E. Whether the application is accurate and complete; and
 - F. Whether the Applicant's compliance history or technical capabilities raise any issues regarding the Applicant's ability to comply with the

material terms of the permit that warrant denying or altering the terms of the draft permit.

Proceedings at SOAH

25. This matter was docketed with SOAH on July 7, 2024.
26. A preliminary hearing was held on September 30, 2024, via Zoom videoconference. Applicant, the Executive Director (ED) of TCEQ, the Office of Public Interest Counsel (OPIC), and Protestant were named as parties.
27. The parties submitted an agreed procedural schedule, which was adopted.
28. At a prehearing conference on January 24, 2025, the ALJ granted Applicant's Motion for Summary Disposition on Issues B, D, and F.
29. The hearing on the merits was held via Zoom videoconference on January 27-28, 2025, before SOAH ALJ Rebecca S. Smith. Corix was represented by attorney David Tuckfield. Environmental Stewardship was represented by attorney Eric Allmon. The ED was represented by attorneys Allie Soileau and Aubrey Pawelka. OPIC was represented by attorney Pranjal Mehta. The record closed on March 7, 2025, with the filing of response briefs.

Water Quality

30. The use of default hydraulic coefficients in the modeling of the unnamed tributary was appropriate.
31. The TCEQ's Implementation Procedures (IPs) provide that for DO modeling, the temperature is assumed to be 30.5° C unless critical low-flows reliably occur only at other temperatures.
32. Because of reservoir releases, critical low flows of Colorado River below Lady Bird Lake occur in the cooler months, not during summer.
33. Use of October temperatures in modeling was appropriate under the IPs.
34. The DO modeling used appropriate flow rates.

35. Segment 1428 is not currently listed in Texas's inventory of impaired and threatened waters.
36. Photographs of algae in the unnamed tributary and the Colorado River do not establish that the water quality uses will be impaired.
37. A Tier 1 antidegradation review preliminarily determined that existing water quality uses will not be impaired by discharge pursuant to the Draft Permit.
38. Numerical and narrative criteria to protect existing uses will be maintained.
39. The Tier 1 analysis complied with 30 Texas Administrative Code section 307.5 and the IPs for the Texas Surface Water Quality Standards.
40. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Colorado River below Lady Bird Lake/Town Lake, which has been identified as having exceptional aquatic life use.
41. The discharge is subject to the Colorado Watershed Protection Rule, which provides for a TP limit of 1 mg/L, based on a 30-day average.
42. The TP limit in the Draft Permit will be protective of the receiving waters.
43. A discharge in compliance with the Draft Permit will protect water quality in the receiving waters, including the protection of the health of the requesters and the requesters' families, the existing uses of the receiving waters, and groundwater in the area.

Regionalization

44. Protestant did not present any evidence that demonstrates that one or more provisions in the Draft Permit violates a specifically applicable state or federal requirement relating to regionalization or need.

Nuisance Odors

45. The Draft Permit requires Applicant to obtain approval of a nuisance odor plan before it can begin operation.

Public Notice

46. Protestant did not present any evidence that demonstrates that one or more provisions in the Draft Permit violates a specifically applicable state or federal requirement relating to public notice.

Accuracy and Completeness of the Application

47. Applicant was not required to make a showing that the proposed discharge is necessary for important social or economic development.
48. The Application is accurate and complete.

Compliance History and Technical Capabilities

49. No evidence suggests that Applicant's compliance history or technical capabilities raise any issues regarding its ability to comply with the material terms of the Draft Permit.

Transcription Costs

50. The Application is complete and accurate.
51. The ALJ required that the hearing on the merits be transcribed.
52. No evidence was presented about the parties' ability to pay transcription costs.
53. All parties participated in the hearing on the merits.
54. All parties benefitted equally from having the transcript, except that only Protestant benefitted from the offer of proof.
55. Based on the factors set out in 30 Texas Administrative Code section 80.23(d)(1), Applicant should pay 75% of the transcription costs (or \$4,078.31), and Protestant should pay 25% (or \$1,359.44).

II. CONCLUSIONS OF LAW

1. TCEQ has jurisdiction over this matter. Tex. Water Code chs. 5 and 26.
2. SOAH has jurisdiction to conduct a hearing and to prepare a PFD in contested cases referred by the Commission under Texas Government Code section 2003.047.
3. Notice was provided in accordance with Texas Water Code sections 5.115 and 26.028; Texas Government Code sections 2001.051 and .052, and 30 Texas Administrative Code sections 39.405 and .551.
4. The Application is subject to the requirements in Senate Bill 709, effective September 1, 2015. Tex. Gov't Code § 2003.047(i-1)-(i-3).
5. Applicant's filing of the Administrative Record established a prima facie demonstration that: (1) the Draft Permit meets all state and federal legal and technical requirements; and (2) a permit, if issued consistent with the Draft Permit, would protect human health and safety, the environment, and physical property. Tex. Gov't Code § 2003.047(i-1); 30 Tex. Admin. Code §§ 80.17(c)(1), .117(c)(1), .127(h).
6. To rebut the prima facie demonstration established by the Administrative Record, a party must present evidence that (1) relates to one of the Referred Issues; and (2) demonstrates that one or more provisions in the Draft Permit violates a specifically applicable state or federal requirement. Tex. Gov't Code § 2003.047(i-2); 30 Tex. Admin. Code §§ 80.17(c)(2), .117(c)(3).
7. If a party rebuts the prima facie demonstration, the Applicant and the ED may present additional evidence to support the Draft Permit. Tex. Gov't Code § 2003.047(i-3); 30 Tex. Admin. Code §§ 80.17(c)(3), .117(c)(3).
8. Applicant retains the burden of proof on the issues regarding the sufficiency of the Application and compliance with the necessary statutory and regulatory requirements. 30 Tex. Admin. Code § 80.17(a).

9. The burden of proof is by preponderance of the evidence. 30 Tex. Admin. Code § 80.17(a).
10. Summary disposition was appropriate on the issues of regionalization and need, public notice, and compliance history because the pleadings, admissions, affidavits, stipulations, deposition transcripts, interrogatory answers, other discovery responses, exhibits and authenticated or certified public records, if any, on file in the case at the time of the hearing show that there is no genuine issue as to any material fact on those referred issues and that the moving party is entitled to summary disposition as a matter of law on them. 30 Tex. Admin. Code § 80.137(c).
11. The Draft Permit is subject to the Colorado River Watershed rules found in 30 Texas Administrative Code sections 311.41-.44.
12. The Colorado River Watershed rules provide for a maximum effluent TP limit of 1.0 mg/L for wastewater treatment plants discharging into a tributary of Segment 1428. 30 Tex. Admin. Code § 311.43(a)(4).
13. The Draft Permit is protective of water quality, including the protection of the health of the requester and the requesters' families, the existing uses of the receiving waters, and groundwater in the area in accordance with applicable regulations including the Texas Surface Water Quality Standards in 30 Texas Administrative Code chapter 307.
14. The Commission may require all reasonable methods to encourage and promote the development of area-wide and regional wastewater systems to protect water quality. Tex. Water Code §§ 26.003, .081.
15. Texas Water Code sections 26.0282 and .081 give the Commission several options that it may exercise to encourage and promote regionalization based on the evidence presented concerning the need for the permit and other systems in the geographic area.
16. The Draft Permit should not be denied nor should its terms and conditions be altered based on regionalization or need.

17. A submission of a nuisance odor control plan for approval after the permitting process is completed satisfies the nuisance odor requirements of 30 Texas Administrative Code section 309.13(e).
18. Applicant substantially complied with applicable public notice requirements. Tex. Water Code §§ 5.115, 26.028; 30 Tex. Admin. Code §§ 39.405, .551.
19. Applicant's compliance history or technical capabilities do not raise any issues regarding its ability to comply with material terms of the permit that warrant denying or altering the terms of the draft permit. 30 Tex. Admin. Code ch. 60.
20. No transcript costs may be assessed against the ED or OPIC because TCEQ's rules prohibit the assessment of any cost to a statutory party who is precluded by law from appealing any ruling, decision, or other act of the Commission. Tex. Water Code §§ 5.275, .356; 30 Tex. Admin. Code § 80.23(d)(2).
21. Factors to be considered in assessing transcript costs include: the party who requested the transcript; the financial ability of the party to pay the costs; the extent to which the party participated in the hearing; the relative benefits to the various parties of having a transcript; and any other factor which is relevant to a just and reasonable assessment of the costs. 30 Tex. Admin. Code § 80.23(d)(1).
22. Considering the factors in 30 Texas Administrative Code section 80.23(d)(1), a reasonable assessment of hearing transcript costs is that Applicant should pay 75% of the transcription costs (or \$4,078.31), and Protestant should pay 25% (or \$1,359.44).

NOW, THEREFORE, BE IT ORDERED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, IN ACCORDANCE WITH THESE FINDINGS OF FACT AND CONCLUSIONS OF LAW, THAT:

23. The Application of Corix Utilities (Texas) Inc. for Texas Pollutant Discharge Elimination System Permit No. WQ0013977001 is granted.
24. Applicant must pay 75% (or \$4,078.31) and Protestant must pay 25% (or \$1,359.44) of the transcription costs.

25. The Commission adopts the ED's Response to Public Comment in accordance with 30 Texas Administrative Code § 50.117(f).
26. All other motions, requests for entry of specific Findings of Fact or Conclusions of Law, and any other requests for general or specific relief, if not expressly granted herein, are hereby denied.
27. The effective date of this Order is the date the Order is final, as provided by Texas Government Code § 2001.144 and 30 Texas Administrative Code § 80.273.
28. TCEQ's Chief Clerk shall forward a copy of this Order to all parties.
29. If any provision, sentence, clause, or phrase of this Order is for any reason held to be invalid, the invalidity of any provision shall not affect the validity of the remaining portions of this Order.