SOAH DOCKET NO. 582-25-01778
TCEQ DOCKET NO. 2024-0670-MWD

APPLICATION BY MUNICIPAL OPERATIONS, LLC FOR NEW TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NO. WQ0016171001	**§**	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

ALIGNED PROTESTANTS' WRITTEN CLOSING ARGUMENTS

March 11, 2025

SOAH DOCKET NO. 582-25-01778
TCEQ DOCKET NO. 2024-0670-MWD

APPLICATION BY MUNICIPAL OPERATIONS, LLC FOR NEW TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NO. WQ0016171001	**§**	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

TABLE OF CONTENTS

I. Introduction & Summary 1

II. Burden of Proof 3

III. Referred Issues 6

A. Issue A: Whether the draft permit is adequately protective of water quality, including surface water, groundwater, and drinking water wells. 6

1. Applicable Law 6

a. TSWQS Tier 1 Anti-Degradation Review (Protection of All Historically Attainable Uses) 7

b. Tier 2 Anti-Degradation Review (Protecting High-Quality Waters from More Than a De Minimis Lowering of Quality) 8

c. General Criteria 9

d. Toxic Materials 10

2. Standards for Receiving Waters 10

3. Historic and Attainable Conditions of the Receiving Waters 15

a. Helotes Creek Within Guajolote Ranch 15

b. Helotes Creek Downstream of Guajalote Ranch Property 17

c. Lower Leon Creek 20

4. Dissolved Oxygen 20

a. There is no basis in law for superseding the numeric DO criteria with a "margin of safety." 21

b. The QUAL-TX model does not accurately predict the concentration of dissolved oxygen in Helotes Creek. 27

5. Total Phosphorus 31

a. The phosphorus discharge has the reasonable potential to cause excessive algal growth impairing contact recreation uses. 32

b. The required Tier 2 evaluation was not performed with regard to the discharge of phosphorus into Helotes Creek. 38

c. In the alternative only, a proper consideration of the nutrient screening demonstrates that the phosphorus limit in the permit should be 0.02 mg/L. 39

6. Nitrate Nitrogen 40

7. CECs and PFAS 42

8. Protection of Groundwater Conditions 46

B. Issue B: Whether the draft permit is protective of wildlife, including endangered species, in accordance with the Texas Surface Water Quality Standards in 30 Tex. Admin. Code Chapter 307. 49

C. Issue C: Whether the draft permit adequately addresses nuisance odor, in accordance with 30 Tex. Admin. Code § 309.13(e). 53

D. Issue D: Whether the draft permit complies with siting requirements regarding flood plains and wetlands, in accordance with 30 Tex. Admin. Code Chapter 309. 53

E. Issue E: Whether Applicant substantially complied with applicable public notice requirements. 54

F. Issue F: Whether the Applicant adequately identified the operator in the application. 54

G. Issue G: 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 TWC § 26.081. 55

IV. Transcript Costs 56

V. Conclusion 57

SOAH DOCKET NO. 582-25-01778
TCEQ DOCKET NO. 2024-0670-MWD

APPLICATION BY MUNICIPAL OPERATIONS, LLC FOR NEW TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NO. WQ0016171001	**§**	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

ALIGNED PROTESTANTS' WRITTEN CLOSING ARGUMENTS

TO THE HONORABLE ADMINISTRATIVE LAW JUDGES SHENOY AND DOGGETT:

Protestants Greater Edwards Aquifer Alliance and the City of Grey Forest (collectively, "Aligned Protestants") file these Written Closing Arguments and urge the Honorable Administrative Law Judges to issue a Proposal for Decision recommending denial of the Application by Municipal Operations, LLC's ("Applicant" or "Municipal Operations") for a new Texas Pollutant Discharge Elimination System (TPDES) permit.

I. Introduction & Summary

Municipal Operations seeks permission to discharge up to an annual average of 1.0 million gallons per day ("MGD") of domestic wastewater into Helotes Creek approximately two miles north of the City of Grey Forest, where Helotes Creek traverses through the City as its central feature. The proposed effluent would subsequently flow to Lower Leon Creek Segment 1906. Applicant has failed to demonstrate under the Tier 1 review that the Draft Permit will maintain existing uses of Helotes Creek and Lower Leon Creek Segment 1906 and that the Draft Permit will preserve water quality sufficient to maintain those existing uses under 30 Tex. Admin. Code § 307.5(b)(1). The immediate receiving waters in Helotes Creek are intermittent with perennial pools, and these waters

are more sensitive to impacts from wastewater effluent than was recognized by the Applicant and the Executive Director. Because of the "habitat characteristics," presence of "sensitive species," "species assemblage," "species diversity," "species richness," and "trophic structure" in the intermittent pools in Helotes Creek in the City of Grey Forest, Helotes Creek should, at a minimum, have received an aquatic life use of "intermediate."[1]

The Applicant also fails to demonstrate under Tier 2 review by a *preponderance of the evidence* that this discharge will not degrade receiving waters—which include pristine Texas Hill Country waters used by GEAA members and Grey Forest residents for swimming, fishing, and recreating—by more than a *de minimis* amount under 30 Tex. Admin. Code § 307.5(b)(2). Since Aligned Protestants have demonstrated that the waters of Helotes Creek are "fishable/swimmable," Aligned Protestants have demonstrated that a Tier 2 anti-degradation review is required for those waters. Yet, no such review was performed by either the Applicant or the Executive Director.

Furthermore, the record evidence does not demonstrate that the proposed effluent limits for nutrients—namely Total Phosphorus and Ammonia Nitrogen—will prevent excessive algae growth or maintain aesthetically attractive conditions, as required by the narrative water quality standards. *See* 30 Tex. Admin. Code §§ 307.4(b), (e). Nor does the record evidence demonstrate that the proposed minimum effluent limit for dissolved oxygen will maintain the numeric water quality standards. *See* 30 Tex. Admin. Code § 307.4(h).

[1] Ex. ED-ML-6 at 0039 (Table 1).

The proposed discharge will also contain per- and polyfluoroalkyl substances ("PFAS"), otherwise known as "forever chemicals," which are potentially toxic to humans and wildlife. The record shows that neither the Applicant nor ED considered potential impacts from PFAS. Issuance of the permit without regard for these impacts violates the requirements of the TSWQS that waters not be toxic to aquatic life, as set forth at 30 Tex. Admin. Code §§ 307.4(d) and 307.6(b)(4).

The Applicant has further failed to demonstrate that the Draft Permit is protective of groundwater quality. Contaminants from the wastewater discharge could quickly reach domestic wells and public water supply wells operated by Grey Forest Utilities, some of which are located within one half mile of the discharge point.

Furthermore, there is no "need" for Municipal Operations' proposed wastewater facility, as is relevant under Tex. Water Code § 26.0282, because there is no need for the housing development relied upon to justify the plant. For these reasons, Municipal Operations' Application should be denied. If not denied, more stringent effluent limits should be required in any permit issued.

II. Burden of Proof

In a SB 709 permit hearing, 30 Tex. Admin. Code § 80.17(a) places the burden of proof on the moving party by a preponderance of the evidence, where the Applicant is the moving party. While the filing of the administrative record is a *prima facie* demonstration that the burden has been met, a party may rebut this presumption by presenting evidence on the referred issues that demonstrates the draft permit violates at least one applicable state or federal requirement. 30 Tex. Admin. Code § 80.17(c)(2).

There are three particular aspects of the prima facie presumption relevant for consideration in this matter: (1) the presumption applies solely to the *draft permit*, but not the *application*; (2) the conditions of the draft permit fail to meet the applicable requirements if there is even a *reasonable potential* that the discharge will result in a violation of the water quality standards; and, (3) protestants' burden is one of *production* rather than *persuasion.*

The prima facie presumption of Tex. Gov't Code § 2003.047 is that the *draft permit* meets all applicable requirements. This statute does not apply to the *application.* The plain language of Tex. Gov't Code § 2003.047(i-1)-(i-3) is properly understood as not applying to regulatory requirements that are merely elements of an application. When interpreting a statute, an attempt must be made to give effect to every word and phrase. *Centerpoint Builders GP, LLC v. Trussway, Ltd*., 496 S.W.3d 33, 36 (Tex. 2016). Furthermore, the courts presume that the Legislature deliberately and purposefully omits words and phrases it does not enact. *Id*. Given that Tex. Gov't Code § 2003.047(i-1)-(i-3) make reference to the draft permit but no reference to the application, it is improper to apply the prima facie presumption created by that section to all elements of an application. For example, the question of whether there is a need for a facility is an element of the application, rather than the draft permit, and thus the prima facie presumption has no application to such an issue.

The nature of the demonstrations required of the parties is also a function of the substantive law involved. In particular, the Draft Permit is subject to 30 Tex. Admin. Code § 305.531(4), which requires:

> **[Permit] limitations must control all pollutants** or pollutant parameters (either conventional, nonconventional, or toxic pollutants) **which the Director determines are or may be discharged at a level which will cause, have the *reasonable potential* to cause, or contribute to** an excursion above any State water quality standard, including State narrative criteria for water quality.[2]

Given that permit conditions must ensure that discharged contaminants do not even have a "reasonable potential" to cause an excursion of surface water quality standard, it is not necessary that protestants demonstrate that a discharge *will* cause a violation of the applicable water quality standards. To meet their burden, protestants need only demonstrate that a discharge within the conditions of the permit would have a reasonable potential to cause or contribute to a violation of the water quality standards. The identification of a significant potentiality unaddressed by the applicant meets this requirement. Moreover, under prior precedent, protestants bear a burden of production, rather than a burden of persuasion. The nature of protestants' burden has been specifically addressed by the State Office of Administrative Hearings in both the matter of the *Application of the City of Dripping Springs for New TPDES Permit No. WQ0014488003* and the matter of the *Application of Vulcan Construction Materials, LLC for Permit No. 147392L001*.[3] In the *Dripping Springs* matter, the Administrative Law Judge ("ALJ") concluded that protesting parties do not bear a burden of persuasion and that SB 709 does not shift the burden of

[2] 30 Tex. Admin. Code § 305.531(4), incorporating by reference 40 C.F.R. § 122.44, including 40 C.F.R. § 122.44(d)(1)(i) (emphasis added).

[3] Tex. State Office of Admin. Hearings, *Application by the City of Dripping Springs for New TPDES Permit No. WQ0014488003*, SOAH Docket No. 582-18-3000 (Nov. 16, 2018) (Proposal for Decision) (*rev'd on other grounds*) (hereinafter, "*Dripping Springs* PFD"); Tex. State Office of Admin. Hearings, *Application of Vulcan Construction Materials, LLC for Permit No. 147392L001*, SOAH Docket No. 582-19-1955 (Sept. 3, 2019) (hereinafter, "*Vulcan* PFD").

proof to protesting parties.[4] Rather, the ALJ found that protestants merely have a burden to present evidence that raises a genuine issue of fact as to whether the permit meets an applicable requirement.[5] Accordingly, the ALJ in the *Dripping Springs* matter concluded, "SB 709 sets out a burden of production on protesting parties, not a burden of persuasion."[6]

In the *Vulcan* matter, the ALJs reached a similar conclusion on this question. There, the ALJs noted that Senate Bill 709 "does not change the underlying burden of proof," that "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."[7]

III. Referred Issues

A. Issue A: Whether the draft permit is adequately protective of water quality, including surface water, groundwater, and drinking water wells.

1. Applicable Law

TCEQ has a responsibility to ensure that each TPDES permit issued contains conditions sufficient to protect the Texas Surface Water Quality Standards (TSWQS). Where such conditions are impossible, then the permit must be denied. Tex. Water Code § 26.027.

[4] *Dripping Springs* PFD at 3-4.
[5] *Dripping Springs* PFD at 4.
[6] *Dripping Springs* PFD at 4.
[7] *Vulcan* PFD at 4 (citing 30 Tex. Admin. Code § 80.17(a),(c)) (applying substantive requirements applicable to air quality permit applications).

National Pollutant Discharge Elimination System (NPDES) permits are issued pursuant to authority delegated to the State of Texas by the United States Environmental Protection Agency (EPA). For such a permit, TCEQ's regulations at 30 Tex. Admin. Code § 305.531(4) incorporate the federal regulations of 40 C.F.R. § 122.44. That incorporated regulation requires that each NPDES permit incorporate any requirements necessary to achieve the State's water quality standards. 40 C.F.R. § 122.44(d).

The TSWQS applicable to this permit include the Tier 1 anti-degradation review (30 Tex. Admin. Code § 307.5(b)(1)), Tier 2 anti-degradation review (30 Tex. Admin. Code § 307.5(b)(2)), the general criteria of the TSWQS (30 Tex. Admin. Code § 307.4) (which include prohibitions on excessive algal growth and require that surface waters be maintained in an aesthetically attractive condition), and the toxicity prohibitions of the TSWQS (30 Tex. Admin. Code § 307.6(b)(2),(4)).

Where the discharge would inherently cause or contribute to a violation of the water quality standards by virtue of the nature of the discharge or the status of the receiving waters, then the conditions of the permit fail to achieve the State's water quality standards, and thus the permit must be denied, since the permit would not meet the requirements of 30 Tex. Admin. Code § 305.531(4).

a. TSWQS Tier 1 Anti-Degradation Review (Protection of All Historically Attainable Uses)

The Tier 1 anti-degradation review of 30 Tex. Admin. Code § 307.5(b)(1) requires that a draft permit maintain existing uses and water quality sufficient to maintain those existing uses. For purposes of this regulation, "existing uses" includes more than just the

uses that the waters are capable of attaining in their current state. Rather, existing uses includes, "a use that is currently being supported by a specific water body or that was attained on or after November 28, 1975." 30 Tex. Admin. Code § 307.3(27). Thus, even if a water body has been degraded over time such that a previously attainable use is no longer supported by the actual conditions of the receiving waters, the permit must include conditions that will ensure achievement of that historically higher use.

b. Tier 2 Anti-Degradation Review (Protecting High-Quality Waters from More Than a De Minimis Lowering of Quality)

The Tier 2 anti-degradation review is intended to ensure that the protection of existing uses, required by Tier 1, does not become a floor to which all waters in the State sink. Thus, the Tier 2 review seeks to ensure that any degradation of high-quality waters is specifically justified as necessary. In particular, 30 Tex. Admin. Code § 307.5(b)(2) provides that:

> No activities subject to regulatory action that would cause degradation of waters that exceed fishable/swimmable quality are allowed unless it can be shown to the commission's satisfaction that the lowering of water quality is necessary for important economic or social development. 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. Water quality sufficient to protect existing uses must be maintained. 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.

Municipal Operations' proposed discharge would flow into Helotes Creek and then into Lower Leon Creek, Segment No. 1906 of the San Antonio River Basin, the first downstream classified receiving water. TCEQ Rule 307.10(1) has designated high aquatic life uses, primary contact recreation, and public water supply for Segment 1906. 30 Tex.

Admin. Code § 307.10(1). Accordingly, the receiving waters of Lower Leon Creek are "fishable/swimmable," and subject to the requirements of a Tier 2 review.

While a demonstration of social or economic necessity is not required for a lowering of water quality by less than a "de minimis" extent, the regulations for a Tier 2 anti-degradation review seek to ensure that a water body does not die a "death of a thousand cuts"—in other words a situation where numerous de minimis discharges result in the degradation of a receiving water body, even if any single discharge would not, by itself, lower water quality by a more than de minimis extent. Thus, the baseline condition for determining whether degradation will occur is the highest water quality sustained in the receiving waters since November 28, 1975. 30 Tex. Admin. Code § 307.5(c)(2)(B).

c. General Criteria

The TSWQS at 30 Tex. Admin. Code § 307.4 also establish several general criteria for surface waters, both narrative criteria and numeric criteria. These criteria apply to all surface water in the State and specifically apply to substances related to waste discharges or human activity. 30 Tex. Admin. Code § 307.4(a).

Among these general criteria, nutrients from permitted discharges "must not cause excessive growth of aquatic vegetation that impairs an existing, designated, presumed or attainable use." 30 Tex. Admin. Code § 307.4(e). In addition, surface waters must not be toxic to humans or terrestrial or aquatic life. 30 Tex. Admin. Code § 307.4(d). Moreover, surface waters must be "maintained in an aesthetically attractive condition." 30 Tex. Admin. Code § 307.4(b)(4). These general criteria also require dissolved oxygen concentrations sufficient to support existing, designated, and presumed aquatic life uses,

which are determined further in 30 Tex. Admin. Code § 307.7. 30 Tex. Admin. Code § 307.4(h).

d. Toxic Materials

In addition to the prohibition on toxicity set forth in the general criteria, the TSWQS further specifically provide that water in the State subject to aquatic life use must not be chronically toxic to aquatic life. 30 Tex. Admin. Code § 307.6(b)(2). This rule also requires that water in the State must be maintained to preclude adverse toxic effects on aquatic life or terrestrial life. 30 Tex. Admin. Code § 307.6(b)(4).

2. Standards for Receiving Waters

The existing, designated, and presumed uses of a waterbody determine which particular criteria that waterbody is subject to. In this case, Helotes Creek is the immediate receiving water and is unclassified, while Lower Leon Creek Segment 1906 is the first downstream classified receiving water.

TCEQ staff determined that Helotes Creek upstream of an unnamed tributary had minimal aquatic life use, and downstream from the unnamed tributary had limited aquatic life use, based on its characterization as intermittent with perennial pools.[8]

[8] Ex. GEAA-103 at 1.

But, the Executive Director's designation of the entirety of Helotes Creek as subject to only limited aquatic life use was in error. TCEQ's Implementation Procedures note that "Unclassified intermittent streams with perennial pools are presumed to have a limited aquatic life use and corresponding dissolved oxygen criterion."[9] "Higher uses will be maintained where they are attainable."[10] Water bodies with "limited" aquatic life uses are characterized by uniform habitat characteristics, with most regionally expected species absent, a low diversity of species, and a low species richness.[11] Helotes Creek demonstrates an abundance of species present – ranging from spotted bass, to crayfish, to sun perch, to multiple species of turtles, along with frogs.[12]

Red Eared Baby Slider Turtle near Helotes Creek[13]

[9] Ex. ED-ML-6 at 0039 (Table 1) - 0040.
[10] *Id.* at 0040.
[11] Ex. ED-ML-6 at 15.
[12] Ex. GEAA-600, 601, 602, 605, 606, 607, 608, 610.
[13] Ex. GEAA-607.

Crayfish caught in Helotes Creek[14]

Spiny Softshell Turtle near Helotes Creek[15]

[14] Ex. GEAA-607.
[15] Ex. GEAA-610.

Rio Grande Leopard Frog near Helotes Creek[16]

Considering this richness of species, Helotes Creek through the City of Grey Forest should not have been categorized as subject to limited aquatic life use.

Kerry McEntire and others fish in Helotes Creek in the City of Grey Forest downstream of the proposed discharge for spotted bass, crayfish, and sun perch.[17] Mr. McEntire testified that whenever he goes fishing in Helotes Creek, he is virtually guaranteed to catch sun perch.[18]

[16] Ex. GEAA-608.
[17] *See, generally,* Ex. GEAA-600 at 10-13, 5:4-7, 6:18 – 7:7.
[18] Ex. GEAA-600 at 4-7.

Kerry McEntire with Spotted Bass caught in Helotes Creek[19]

Sun Perch Caught in Helotes Creek[20]

Consistent with the presence of this wildlife, and the associated fishing activities, Helotes Creek is "fishable."

Furthermore, the uncontroverted evidence demonstrates that Helotes Creek is "swimmable." Kerry McEntire offered unchallenged testimony that he learned to swim in Helotes Creek, that he has taught his children to swim in Helotes Creek, and that insects land on his feet while he is floating in the swimming hole along Helotes Creek.[21]

[19] Ex. GEAA-601.
[20] Ex. GEAA-605; Ex. GEAA-600 at 5:2-7.
[21] Ex. GEAA-600 at 3:10-12, 5:11-14.

The TCEQ staff acknowledge that their aquatic life use determinations are preliminary, meaning they may be modified if new information is received.[22] In this case, the additional information developed as a result of the hearing warrants treatment of the unnamed tributary as subject to no less than intermediate aquatic life use, and "fishable/swimmable."

As to Lower Leon Creek, under 30 Tex. Admin Code § 307.10, Appendix A, TCEQ has designated high aquatic life uses, primary contact recreation, and public water supply for Segment 1906 with the following numeric standards:

- 120 mg/L Chloride ("C^{-1}")
- 120 mg/L Sulfate ("SO_4^{-2}")
- 700 mg/L Total Dissolved Solids ("TDS")
- 5.0 mg/L Dissolved Oxygen ("DO")
- PH range of 5.0
- 126/100 mL *E. coli*
- 90 degrees F

3. Historic and Attainable Conditions of the Receiving Waters

a. Helotes Creek Within Guajolote Ranch

The hydrology of Helotes Creek within the discharge route differs dramatically depending upon the area of Helotes Creek under consideration. The immediate area downstream of the discharge point within property owned by Guajalote Ranch, Inc. is an intermittent stream with perennial pools. This is the portion of the Creek documented by Dr. Ross during her December 2024 visit, as depicted below: [23]

[22] *Id*. at 1-2.
[23] Ex. GEAA-100 at 10:10-13.

Photograph 0213 taken by Dr. Lauren Ross (Waypoint 314), taken during her site visit on December 12, 2024.[24]

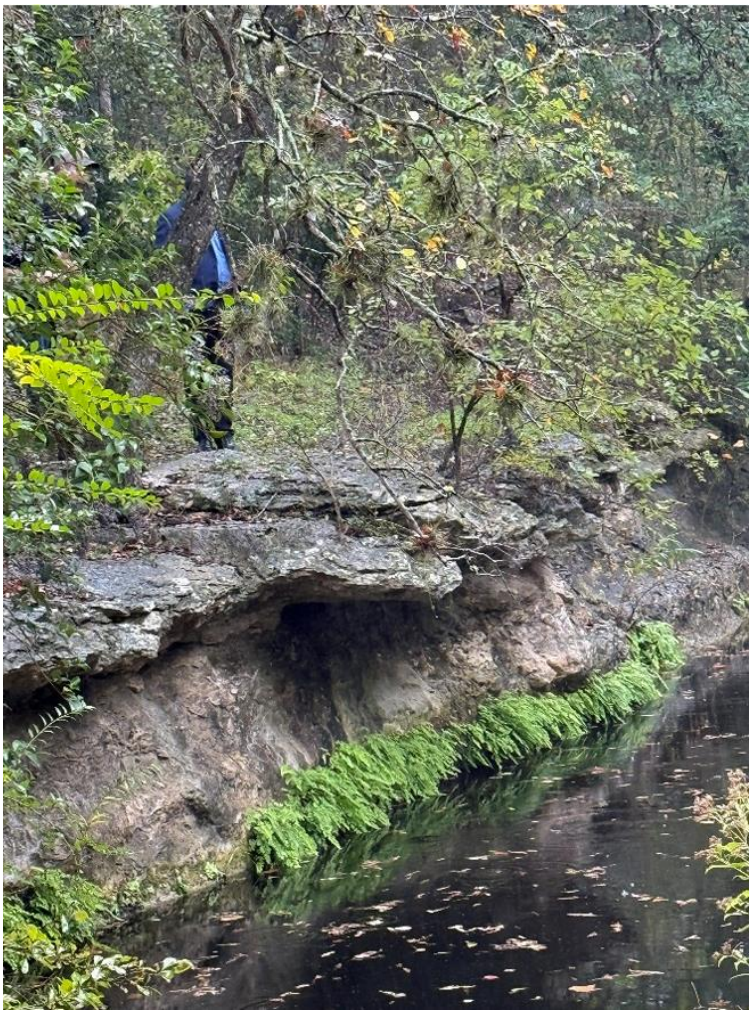
Dr. Ross testified that "[t]hese photographs display conditions that are typical of channel reaches *between the outfall and the stock pond downstream*."[25] It is within this area that Dr. Miertschin testified that the width of the receiving channel would be 10 to 15 feet.[26]

[24] Ex. GEAA-111 at 1; *see also* Ex. GEAA-110, Map of Field Investigation Waypoints.
[25] Ex. GEAA-100 at 10:11-13 (emphasis added).
[26] Tr. Vol. 2 at 226:13-17.

The lowest dissolved oxygen concentration occurs within the pond in this area, which leads to the perennial pond within this portion of Helotes Creek being of significant interest for compliance with the dissolved oxygen standards.

b. Helotes Creek Downstream of Guajalote Ranch Property

The character of Helotes Creek downstream of Guajalote Ranch changes dramatically from the character of Helotes Creek within Guajalote Ranch. For example, at Waypoint 249, Dr. Ross observed clear water within Helotes Creek as a substantial water body.



Photograph 0277 by Dr. Lauren Ross (Waypoint 350), taken during her site visit on December 12, 2024.[27]

[27] Ex. GEAA-111 at 4; *see also* Ex. GEAA-110, Map of Field Investigation Waypoints.

It is within this area of Helotes Creek, stretching through the City of Grey Forest, that the community engages in fishing and swimming with an abundance of species such as frogs which require the consistent presence of water.[28] The water within Helotes Creek in these areas is very clear.[29] Kerry McEntire fishes for Bass within this area of Helotes Creek.

Exhibit GEAA-601

As evidenced by the similarity to the photograph of Helotes Creek presented in his prefiled testimony, Kerry McEntire testified in front of Helotes Creek when providing testimony during the hearing. This general area of the Creek travels through the City of

[28] *See, generally,* Testimony of Kerry McEntire, Ex. GEAA-600 at 3:16 – 7:11.
[29] Ex. GEAA-600 at 7:12-16.

Grey Forest, where it is kept intact as a wildlife sanctuary and green space for educational and recreational use.[30]

As further discussed below, it is within this area of Helotes Creek that standards for "fishable/swimmable" waters should be applied.

c. Lower Leon Creek

TCEQ's evaluation of Lower Leon Creek, Segment 1906, water quality data as far back as 2002 indicates concerns for near nonattainment for dissolved oxygen, bacteria, cadmium, chromium, lead, nickel, silver and zinc in stream sediments.[31] Furthermore, the Draft 2024 Texas Integrated Report indicates concerns for nutrient screening levels in Lower Leon Creek based on chlorophyll-a measurements, dissolved oxygen, and bacteria.[32] Segment 1906 is also impaired based on PCBs and PFAS concentrations in fish tissue.[33]

4. Dissolved Oxygen

Dissolved oxygen ("DO") concentrations must be sufficient to support existing, designated, presumed, and attainable aquatic life uses. 30 Tex. Admin. Code § 307.4(h)(1). Setting aside whether the aquatic life uses (and their corresponding DO criteria) were properly assigned in Helotes Creek downstream of the outfall (the evidence does not demonstrate they were), the QUAL-TX model relied on by both the Applicant and ED predicts that DO will drop to 2.9 mg/L in the first pond approximately 0.15 miles

[30] Ex. GEAA-400 at 5:2-4.
[31] Ex. GEAA-100 at 4:28-30.
[32] Ex. GEAA-105 at 31.
[33] *Id.*

downstream of the proposed outfall, below the applicable DO criteria of 3.0 mg/L at this location (according to the ED's limited aquatic life use designation). This is plainly not in conformance with the TSWQS and IPs, which are approved by EPA and mandatory standards. Furthermore, the uncalibrated QUAL-TX model does not accurately predict DO in Helotes Creek; in fact, it likely overpredicts DO, making it an unreliable basis for the Draft Permit.

a. There is no basis in law for superseding the numeric DO criteria with a "margin of safety."

As an initial matter, it should be noted that water quality standards for DO are one of the few standards with numeric criteria. There are, for example, no numeric criteria in the TSWQS for 5-day biochemical oxygen demand (BOD5) or 5-day carbonaceous biochemical oxygen demand (CBOD5), or ammonia-nitrogen (NH3-N); however, the results of running the QUAL-TX model supposedly instruct TCEQ staff as to the proposed effluent limits for these narrative criteria in order to maintain requisite numeric DO levels.[34] Applicant and ED now claim that despite unambiguous numeric DO criteria approved by EPA and despite using the uncalibrated QUAL-TX model approved by EPA (though having a reasonable potential to underpredict DO here in Helotes Creek, as explained below), a proposed discharge permit may deviate from these numeric TSWQS approved by EPA because of a 0.20 mg/L "margin of safety" that is *not* approved by EPA.

To be clear, the term "margin of safety" appears in the Clean Water Act, not as the ED and Applicant suggest for relaxing permitting effluent limits that do not meet numeric

[34] *See* Ex. ED-XL-1 at 7:15-19 (Lu Direct).

water quality standards, but in a wholly different context, though instructive. The Clean Water Act requires that each State identify waters within its boundaries for which effluent limits are not stringent enough and set total maximum daily loads ("TMDLs") for pollutants at levels necessary to implement applicable water quality standards "with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality." 33 U.S.C.A. § 1313(d) (West). Not only are setting TMDLs a wholly separate administrative procedure than permitting, but the context makes it clear that a "margin of safety" is a heightened level of protection to account for lack of knowledge, not to justify decreasing protections *because of* the lack of knowledge. The Applicant and ED rely on an uncalibrated model, using default (unknown) parameters. A "margin of safety" as defined in the Clean Water Act would be to increase the requisite DO criteria to account for the unknowns, not lower it.

Instead, allowing a "margin of safety" is effectively setting or amending a water standard, and amounts to *ad hoc* rulemaking, in violation of Chapter 26 of the Texas Water Code and due process, since Texas Water Code Section 26.024 requires that before setting or amending water quality standards, the Commission *shall* (a) hold public hearings at which any person may appear and present evidence under oath, pertinent for consideration by the commission; and (b) consult with the executive administrator of the Texas Water Development Board to insure that the proposed standards are not inconsistent with the objectives of the state water plan. Tex. Water Code § 26.024. Also, the Commission *shall* (c) provide notice of the public hearing by publishing the notice in the Texas Register and

provide notice to certain affected local governments and permit holders. *Id*. at § 26.025. There is no indication that any of these procedures have been followed in order to amend the dissolved oxygen criterion to 0.2 mg/L lower than currently appear in Chapter 307 for all existing, designated, presumed, and attainable uses.

To be clear, TCEQ may not ignore the statutory requirements imposed by the Legislature—not even under the guise of "interpreting" its rules. Courts and agencies "must take statutes as they find them." *Entergy Gulf States, Inc. v. Summers*, 282 S.W.3d 433, 443 & n.1 (Tex. 2009). Neither courts nor the Commission may "rewrite the statute under the guise of interpreting it." *Colo. Cnty. v. Staff*, 510 S.W.3d 435, 444 (Tex. 2017). "The wisdom or expediency of the law is the Legislature's prerogative, not [the Commission's]." *Univ. of Tex. v. Garner*, 595 S.W.3d 645, 651 (Tex. 2019) (per curiam) (quotation and citation omitted). Further, an agency's interpretation of a statute or a statutory term is valid only insofar as it is consistent with the statute and will not be effective to expand or to contract the language of the statute. *Sw. Royalties, Inc. v. Hegar*, 500 S.W.3d 400, 406 (Tex. 2016) (citing *Firestone Tire & Rubber Co. v. Bullock*, 573 S.W.2d 498, 500 n.3 (Tex. 1978)). Courts will not credit an agency interpretation that is contrary to or departs from the clear meaning of the statutory language. *Tracfone Wireless, Inc. v. Comm'n on State Emergency Commc'ns*, 397 S.W.3d 173, 182 (Tex. 2013). Agency deference does not displace strict construction of a statute, particularly when the dispute is not about how to interpret an ambiguous term in the statute, but rather about whether the statutory requirement should apply at all. *Firestone Tire & Rubber Co. v. Bullock*, 573 S.W.2d 498, 500 n.3.

Furthermore, the ED is not at liberty to disregard the plain language of its own rules. Courts construe administrative rules using statutory construction principles, giving effect to the plain meaning of words and considering the regulatory scheme as a whole. *TGS-NOPEC Geophysical Co. v. Combs*, 340 S.W.3d 432, 438-39 (Tex. 2011); Tex. Gov't Code §§ 311.011(a), 311.023(1). Here, there is no ambiguity in the Commission's regulatory language. The ED, thus, cannot adopt an interpretation that allows it to disregard the plain language of the Commission's rules. *Smith v. Montemayor*, No. 03-02-00466-CV, 2003 WL 21401591, at *4 (Tex. App.—Austin June 19, 2003, no pet.) (holding that an agency acts arbitrarily and capriciously when it defies its own rules' clear, unambiguous language); *Zimmer US, Inc. v. Combs*, 368 S.W.3d 579, 585 (Tex. App.—Austin 2012, no pet.) (same).

Here, the Applicant and ED do not assert that the DO criterion is ambiguous. In fact, it is not. It is a simple numerical value. The witnesses for Applicant and ED have simply taken the position that the 3.0 mg/L standard does not apply, and that neither do the notice and hearing requirements found in Chapter 26 of the Texas Water Code.

But when the Commission adopted the TSWQS, it would have done so in compliance with Chapter 26, prescribing these notice and hearing requirements. *See* 30 Tex. Admin. Code § 307.2(d)(2) ("The narrative provisions, presumed uses, designated uses, *and numerical criteria* of the Texas Surface Water Quality Standards may be amended for a specific water body to account for local conditions. A site-specific standard is an explicit amendment to this chapter, and adoption of a site-specific standard requires the procedures for public notice and hearing established under the Texas Water Code,

§26.024 and §26.025.") (emphasis added). In addition to the notice and hearing requirements of Texas Water Code Sections 26.024 and 26.025, the TCEQ rules require site-specific amendments to include "a use-attainability analysis that demonstrates that reasonably attainable water-quality related uses are protected." 30 Tex. Admin. Code § 307(d)(3). Therefore, not only would bypassing the statutorily-mandated amendment process constitute a procedural harm, it would also constitute a substantive harm because there has been no showing that the attainable uses will be protected.

In addition, Texas has incorporated provisions, pursuant to its delegation of authority from EPA to issue NPDES permits, and to deviate from these requirements, except to make the requirements *more* stringent, would run afoul of this delegation and of the requirements of the Clean Water Act. *See* 40 C.F.R. § 123.25(a) (all State permitting programs must be administered in conformance with certain provisions, including prohibition on issuing new permits if the discharge "will cause or contribute to the violation of water quality standards." 40 C.F.R. § 122.4(i)). Under Section 303(c) (33 U.S.C. § 1313) of the federal Clean Water Act, EPA is to review and to approve or disapprove State-adopted water quality standards to determine, among other things, whether the State's designated water uses are consistent with the requirement of the CWA, whether the State's adopted criteria to protected designated uses are based in science, and whether the State has followed applicable legal procedures for revising or adopting standards. 40 C.F.R. § 131.5(a)(1), (2), and (6). In other words, the federally-delegated NPDES permitting scheme specifically requires TSWQS standards be approved by EPA and that TPDES permits

issued by the Commission comply with the TSWQS, absent a site-specific standard adopted pursuant to strict procedural and technical requirements.

The Applicant and ED's witnesses point to no legally-defensible basis for superseding the TSWQS and IPs. An agency acts arbitrarily and capriciously when: (1) it defies its own rules' clear, unambiguous language, *id*.; *Zimmer US, Inc. v. Combs*, 368 S.W.3d 579, 585 (Tex. App.—Austin 2012, no pet.), or (2) when it acts without reference to guiding rules and principles, *Nucor Steel-Tex. v. Pub. Util. Comm'n of Tex*., 363 S.W.3d 871, 884 (Tex. App.—Austin 2012, no pet.). *See also* Tex. Gov't Code § 2001.174(2)(B)-(C), (F) (requiring reversal of findings, inferences, conclusions, or decisions that exceed agency authority, are unlawful procedure, or are arbitrary or capricious). Staff guidance documents that do not amount to a "rule" are not binding on the Commissioners, even if they purport to be binding on staff. See *Tex. Comm'n on Envtl. Quality v. Friends of Dry Comal Creek*, 669 S.W.3d 506, 521 (Tex. App.—Austin 2023, pet. denied). In fact, in *Friends of Dry Comal Creek*, the Court found that the TCEQ retained discretion to deviate from the guidance procedures, because the procedures explicitly stated that its recommended procedures are not mandatory. *Id*.

Here, the policy of accepting 0.2 mg/L "margin of safety" does not appear in Chapter 307 of TSWQS or the IPs, both of which are approved by EPA. Applicant and ED's witnesses rely entirely on internal documents, none of which have been subject to notice and hearing or EPA review and approval.[35] Because the 0.2 mg/L "margin of safety"

[35] *See* Ex. ED-XL-6; ED-XL-7; ED-XL-8.

does not amount to a "rule" and would effectively circumvent and weaken Chapter 307 rules that govern here, it exceeds the agency's statutory authority. For that reason (even assuming the results of the uncalibrated QUAL-TX model as reliable), the Applicant and the QUAL-TX model fail to demonstrate that the proposed discharge will comply with DO standards and maintain existing uses.

b. The QUAL-TX model does not accurately predict the concentration of dissolved oxygen in Helotes Creek.

It is important to emphasize that both Applicant and ED rely *entirely* upon the uncalibrated QUAL-TX model to determine whether dissolved oxygen levels will be maintained under the Draft Permit. Former TCEQ staff member Josi Robertson originally ran the QUAL-TX model, and the ED's witness Dr. Xing Lu reviewed it. Applicant's witness Dr. James Miertschin simply re-ran the model to confirm the same results. Neither Dr. Miertschin nor Dr. Lu attempted to confirm or verify whether the uncalibrated QUAL-TX modeling was an accurate or reliable prediction, let alone "conservative" as both now claim.[36] In fact, despite initial efforts to characterize the running of the QUAL-TX model as "worst-case," Dr. Miertschin ultimately admitted that his use of the term was synonymous with "critical conditions" as is used in the IPs.[37] Critical conditions are not, as he or Dr. Lu suggest, conditions that are unlikely to occur—the IPs define them as the conditions of three parameters that typically result in the lowest DO levels: ambient flow, wastewater flow, and ambient temperature.[38] This is an important distinction because these

[36] Ex. ED-XL-1 at 12:28-31, 15:25-32 (Lu Direct); e.g., App. Ex. 30 at 14:22-24 (Miertschin Direct).
[37] Tr. Vol. 2 at 200:19-201:18 (Miertschin Cross).
[38] Ex. ED-ML-6 at 0110 (IPs).

three parameters are not exaggerated by any means; in fact, as they are applied here to Helotes Creek, they are consistent with actual and observed conditions in the Creek: first, the IPs instruct that for intermittent streams, an ambient flow of 0.0 cubic feet per second be used.[39] There is ample testimony from the Applicant and ED's witnesses that Helotes Creek at the outfall is "dry,"[40] which makes the 0.0 cubic feet per second consistent with, not conservative from, actual conditions. Second, the IPs instruct that for new applications, the wastewater flow is the proposed average flow or flow. Here Applicant is proposing an annual average flow of effluent up to 1.0 MGD. This is an average, and by definition, not the upper limit of what the Draft Permit would authorize, which is a 2-hour peak of up to 2,778 gallons per minute[41]—the equivalent of four times the 1 MGD annual average. Third, the IPs instruct that the ambient temperature is normally assumed at 30.5 degrees Celsius (approximately 87 degrees Fahrenheit), which is representative of "summer temperatures."[42] As was observed in Liberty Hill, summer temperatures in shallow Hill Country streams can regularly exceed 30.5 C, and Dr. Miertschin admitted that Helotes Creek, even where shaded, could exceed 30.5 C in the summer.[43]

This is all to say that the QUAL-TX model is *not* inherently conservative based on the fact that it was employed using "critical conditions" (ambient flow, wastewater flow, and ambient temperature) as those parameters are defined by the IPs. And yet, this false

[39] *Id.*
[40] *See, e.g.*, Tr. Vol. 2 at 153:25 – 156:1 (Price Cross); Tr. Vol. 2 at 209:7-11 (Miertschin Cross); Tr. Vol. 3 at 39:2, 54:10-11 (Labrie Cross); Tr. Vol. 3 at 146:13-14 (Lu Cross).
[41] App. Ex. 1 at APP000117.
[42] Ex. ED-ML-6 at 0110 (IPs).
[43] Tr. Vol. 2 at 208:20 – 209:6.

assumption that these conditions would be "unlikely to occur" forms the basis of Dr. Lu's—and, to a lesser extent, Dr. Miertschin's—decision not to validate or otherwise confirm the model's accuracy, even though there were other parameters that were obviously not consistent with several witnesses' observations and expert testimony.[44]

For example, the default ambient values resulted in a predicted water depth in Helotes Creek at the outfall of about one foot, a stream width of about 25 feet, and a velocity of 0.09 feet per second.[45] Dr. Ross testified that these hydraulic characteristics are completely unreasonable for Helotes Creek at the outfall based on her calculations and first-hand observations.[46] Dr. Ross used publicly available contour lines to calculate a stream slope of 8 feet over a stream distance of 300 feet.[47] To convey the proposed discharge using the predicted stream depth and width, Dr. Ross calculated that the slope would need to be several orders of magnitude smaller than her calculated slope and the water velocity would be only 0.075 feet per second.

Other witnesses affirmed Dr. Ross's testimony that the predicted hydraulic characteristics are inconsistent with actual characteristics. The ED's witness Ms. Labrie who performed the "receiving waters assessment" visited the site of the outfall and estimated that the width of the Helotes Creek stream bed was "pretty narrow" on the scale of about 4 feet and the slope was "pretty slanted."[48] Applicant's witness Dr. Price estimated that, at the outfall, the Helotes Creek streambed was probably 10 feet wide and he would

[44] *See* Ex. ED-XL-1 at 15:25 – 16.2.
[45] Ex. GEAA-100 at 14:26-27 (Ross Direct).
[46] Ex. GEAA-100 at 14:27 – 15:12 (Ross Direct).
[47] Ex. GEAA-100 at 14:29 – 15:12 (Ross Direct).
[48] Tr. Vol. 3 at 39:18 – 40:2 (Labrie Cross).

expect a velocity of over 1.0 foot per second;[49] and even Dr. Miertschin ultimately agreed that the width, depth, and velocity in the model "may be completely different upon actually having the discharge in the stream," and not representative of Helotes Creek. [50] In fact, he estimated that the channel width is 10-15 feet wide and that velocity above the first pond is likely around 1.0 foot per second.[51]

Dr. Ross visited the site of the outfall and estimated its width was less than 8 feet. She testified that the failure to address the "very, very unrealistic results" produced by the model makes the dissolved oxygen concentrations unreliable.[52] Not only are they unreliable, but Dr. Ross testified they *underestimate* the impact of the proposed discharge on dissolved oxygen, the result of which is that the 2.9 mg/L concentration predicted in the pond is actually higher than will actually be achieved once the proposed discharge is occurring.[53]

At the end of the day, witnesses for both the Applicant and the ED acknowledge that the uncalibrated QUAL-TX model does not accurately predict the concentration of DO that will be maintained in Helotes Creek. Therefore, there is a reasonable potential that the discharge will result in a violation of the water quality standards, namely the numeric DO criteria. Thus, the Draft Permit must be denied.

[49] Tr. Vol. 2 at 151:10-11 (Price Cross).
[50] Tr. Vol. 2 at 219:6-10 (Miertschin Cross); *see also id*. at 220:17-21 (agreeing that the modeling results are what he would expect from an uncalibrated model, but not what he would expect to see on the site at Helotes Creek).
[51] Tr. Vol. 2 at 226:15-17; *Id.* at 241:4-10 (Miertschin Cross).
[52] Tr. Vol. 1 at 142:6-19 (Ross Redirect).
[53] Tr. Vol. 1 at 142:25 – 143:13 (Ross Redirect).

5. Total Phosphorus

The high quantity of phosphorus allowed to be discharged would result in a violation of the TSWQS because: (1) it would create a reasonable potential for impairment of the attainable uses by the stimulation of excessive algal growth (in violation of both the Tier 1 Review and the General Criteria of 307.4(e)), and (2) it would result in a greater than de minimis lowering of water quality with no Tier 2 anti-degradation analysis having been performed on Helotes Creek.

TCEQ's Surface Water Quality Database does not include data for Helotes Creek.[54] However, the Southwest Research Institute (SWRI) collected extensive samples from Helotes Creek in 2018 and 2019.[55] The water quality measurements in the SWRI report serve as a basis for determining Helotes Creek's current trophic state and whether the draft permit would result in degradation by more than a de minimis extent. TCEQ's June 2010 Implementation Procedures describe eutrophication potential as a basis for assessing local effects of discharge on the narrative nutrient stream standards.[56] Similarly, the U.S. EPA considers eutrophication as a basis for establishing a relationship between discharge nutrient standards and biological impacts.[57] Under EPA Ambient Water Quality Criteria Recommendations, Helotes Creek water quality lies on a boundary between oligotrophic and mesotrophic nutrient states. This trophic state indicates stream conditions that are generally clear, clean and unpolluted by wastewater.[58]

[54] Ex. GEAA-100 at 8:7-15.
[55] *Id.* at 8:18-21 (referencing the Southwest Research Institute Report at Ex. GEAA-106).
[56] Ex. ED-ML-6 at 0051.
[57] Ex. GEAA-109 (EPA Ambient Water Quality Criteria Recommendations).
[58] Ex. GEAA-100 at 9:28-30.

a. The phosphorus discharge has the reasonable potential to cause excessive algal growth impairing contact recreation uses.

Dr. Ross explained how the proposed discharge could result in excessive algal growth when considering the similarities of the proposed discharge and the receiving waters to other discharges where problems have occurred.

The condition of the Lower San Gabriel River downstream of the City of Liberty Hill's wastewater discharge demonstrates the impact of a municipal wastewater discharge on algal growth in a similar Texas Hill Country stream:

Photograph DSCN1192 by Dr. Lauren Ross of the South Fork of the San Gabriel River Downstream from the City of Liberty Hill Municipal Wastewater Discharge taken on August 5, 2020.[59]

East Lick Creek downstream of the discharge of the West Cypress Hills subdivision is another similar Texas Hill Country stream that has also experienced excessive algal growth in response to the introduction of municipal wastewater:

[59] Ex. GEAA-112 at 1.

Photograph DSC00989 by Dr. Lauren Ross of East Fork of Lick Creek downstream from West Cypress Hills Discharge taken on May 25, 2018.[60]

Dr. Ross, who has extensive experience analyzing water quality in these Texas Hill Country streams, testified that both the Lower San Gabriel River and East Lick Creek are similar to Helotes Creek and Lower Leon Creek because these waters are all characterized by flat, limestone streambeds and relatively shallow waters that receive adequate sunlight to encourage algal growth.[61]

During the Hearing on the Merits, Applicant's biologist Paul Price called into question whether these Texas Hill Country streams are comparable and whether the receiving waters downstream of Municipal Operations' proposed discharge would experience similarly excessive algal growth. Particularly, Dr. Price questions whether

[60] Ex. GEAA-112 at 2.
[61] Tr. Vol. 1 at 138:16 – 140:5.

excessive algal growth could occur in areas of Helotes Creek experiencing little to no streamflow.[62] Dr. Price did recognize that, similar to the Lower San Gabriel River, Helotes Creek is characterized by large boulders, which have a tendency to cause algal plugs.[63] He further admitted that these large boulders could trap patches of algae in the impounded areas of Helotes Creek:

> Q: And so would your testimony be that . . . putting aside the dry areas . . . that there wouldn't be significant algal growth in those areas similar to the picture we're looking at [in the Lower San Gabriel River]?
> A: There probably will be some that you could see, whoa, there's a patch of algae, as you walk by the stream. But so what? It's a natural—it's a natural thing to happen.[64]

However, Dr. Price did *not* explain why—if large algal patches are "natural" in Texas Hill Country streams—the current natural conditions of Helotes Creek and Lower Leon Creek are clear with no signs of excessive algal blooms, even in impounded areas. Dr. Price also failed to challenge that such conditions are *not* natural where phosphorus levels are as low as they are under current natural conditions within Helotes Creek, as Dr. Ross testified.[65]

Dr. Price did, however, admit that the excessive algal blooms in the Lower San Gabriel River and East Lick Creek would *not* be considered "aesthetically pleasing" by the general public.[66] He testified that *he* would consider the conditions depicted in the above pictures of Helotes Creek downstream of the proposed discharge to be "aesthetically

[62] Tr. Vol. 2 at 159:3-16.
[63] *Id.*
[64] *Id.* at 159:17-25.
[65] Ex. GEAA-100 at 16:12-21.
[66] Tr. Vol. 2 at 163:1-9.

pleasing."[67] He further testified that the general public would not want to wade or swim in the depicted algal conditions in the Lower San Gabriel and East Lick Creek—in fact, he said his grandchildren would likely not want to swim there.[68] Dr. Price also admitted that thick algal mats could impede fishing.[69]

The impact of increased phosphorus in Texas Hill Country streams is well documented and is demonstrated by the above pictures of excessive algal blooms in the Lower San Gabriel River and in East Lick Creek downstream of municipal wastewater discharges. With increased phosphorus concentrations, the dominant algae species shifts, allowing the growth of long strands of a type of algae known as "*Cladophora sp.*"[70] Furthermore, Dr. Ross testified that available data demonstrates "significant changes in benthic algae when total phosphorus concentrations in Texas Hill Country streams increase to more than 0.02 to 0.05 mg/L."[71] Under ordinary conditions, Helotes Creek directly downstream of the proposed discharge is dry outside of intermittent pools, meaning that the discharge will not undergo any dilution of phosphorus concentrations as it travels within this stretch of the discharge route.[72]

As described above, Applicant's own biologist admitted that the proposed discharge may cause algal plugs in intermittent pools in Helotes Creek. However, Dr. Price dismissed algal growth as a "natural" occurrence.[73] This analysis is oversimplified and fails to

[67] Tr. Vol. 2 at 166:6-8.
[68] *Id.* at 160:24 – 161:14.
[69] *Id.* at 161:13-23.
[70] Ex. GEAA-100 at 16:14-20.
[71] *Id.* at 16:23-26; Ex. GEAA-119, Figure 4.
[72] Ex. GEAA-100 at 6-10.
[73] Tr. Vol. 2 at 159:17-25.

recognize that increased phosphorus concentrations in wastewater promote the growth of *different* and *excessive* algae than would be present under "natural conditions." In fact, Dr. Price found that the algal conditions in the Lower San Gabriel River and East Lick Creek would not be considered "aesthetically pleasing" by the general public[74] but was unable to significantly differentiate these water bodies from the impounded areas of Helotes Creek. The Applicant did not otherwise present *any* evidence sufficient to demonstrate that a total phosphorus limit of 0.15 mg/L would maintain the "aesthetically attractive" conditions of Helotes Creek in compliance with the General Texas Water Quality Criteria under 30 Tex. Admin. Code § 307.4(a)(4).

Furthermore, excessive algae growth leads to decreased species diversity and would affect the aquatic life uses and primary contact recreation uses of the receiving waters.

Research demonstrates a decline in species diversity when total phosphorus concentrations increase from less than 0.025 to 0.1 mg/L.[75] For this reason, Dr. Ross testified that "[t]he concentration of total phosphorus in Texas Hill Country streams like Helotes Creek should be maintained at 0.02 mg/L to maintain natural algae assemblages and to protect the most sensitive fish species."[76] The conditions in the Lower San Gabriel River and East Lick Creek demonstrate how thick algal mats impede the ability of the general public to swim, wade, fish, and otherwise recreate in the receiving waters, as admitted by Dr. Price.[77] Applicant has not presented evidence sufficient to demonstrate

[74] Tr. Vol 2 at 163:1-9.
[75] Ex. GEAA-100 at 16:21-23; Ex. GEAA-118 at 5, Figure 1.
[76] Ex. GEAA-100 at 16:26-28.
[77] Tr. Vol. 2 at 160:24 – 161:23.

that a total phosphorus limit of 0.15 mg/L is sufficient to protect the fishable/swimmable waters of Helotes Creek.

Due to the potential for the discharge of phosphorus to impair the aquatic life and recreational uses of the downstream waters, the conditions of the permit fail to ensure compliance with the Tier 1 anti-degradation review requirements of 30 Tex. Admin. Code § 307.5(b)(1), and the permit should be denied.

b. The required Tier 2 evaluation was not performed with regard to the discharge of phosphorus into Helotes Creek.

Issuance of the permit would also be inconsistent with the required Tier 2 anti-degradation requirements. The Tier 2 requirement, set forth at 30 Tex. Admin. Code § 307.5(b)(2), requires that no activities that would cause degradation "of waters that exceed fishable/swimmable quality" are allowed unless it is shown to the Commission's satisfaction that the lowering of water quality is necessary for important social or economic development. Where water will be cumulatively lowered by less than a de minimis extent in comparison to the highest water quality attained since November 28, 1975, this test does not apply. 30 Tex. Admin. Code §§ 307.5(b)(2), 307.5(c)(2)(B).

Even though Helotes Creek is clearly "fishable/swimmable," the Executive Director's staff wholly ignored the requirement of a Tier 2 review for Helotes Creek.[78] The Executive Director did not even determine that the lowering of water quality would be less than de minimis in Helotes Creek, though the evidence demonstrates a potential for a

[78] Ex. ED-ML-3 (Water Quality Standards Memorandum, performing Tier 2 anti-degradation analysis solely for Lower Leon Creek).

significant lowering of water quality within that area. Given that no such analysis was performed, the permit does not comply with the requirements of the TCEQ Rules.

When subjected to a Tier 2 review, the impacts of the discharge upon Helotes Creek will result in a greater than de minimis lowering of water quality, which means the discharge would result in degradation of the receiving waters. No demonstration was made that this degradation is necessary for important social and economic development. Thus, the Application fails to include the demonstration required when the Tier 2 standard is properly applied to Helotes Creek.

c. In the alternative only, a proper consideration of the nutrient screening demonstrates that the phosphorus limit in the permit should be 0.02 mg/L.

In the alternative only, the nutrient screening conducted by the Executive Director's staff demonstrates that a more stringent phosphorus limit is required if the permit is issued. That screening reflected a need for a phosphorus limit due to factors including the large size of the discharge, the high portion of the immediately receiving stream that will consist of effluent, the high water clarity, and the existence of impoundments.[79] When screening indicates that a reduction of total phosphorus is needed, the TCEQ's Implementation Procedures provide that, "an effluent limit is recommended based on reasonably achievable technology-based limits."[80]

As Dr. Ross testified, the phosphorus limit of 0.15 mg/L does not reflect the proper phosphorus limit implementing reasonably achievable technology.[81] In the Lower San

[79] Ex. ED-ML-5.
[80] Ex. ED-ML-6 at 29.
[81] Ex. GEAA-100 at 17:11 – 18:19.

Gabriel River, the City of Liberty Hill has consistently achieved a total phosphorus concentration below 0.05 mg/L.[82] Furthermore, an EPA case study on implementing low-cost modifications to improve nutrient reduction at wastewater treatment plants reports that a wastewater plant in Titusville, Florida achieved a total phosphorus concentration of 0.04 mg/L.[83] Other states, including Colorado, Oregon, New York, Massachusetts, Virginia, and Idaho have reported total phosphorus concentrations well below 0.15 mg/L and as low as 0.01 mg/L[84]—*fifteen times* lower than the limit in the Draft Permit. The engineer who wrote Municipal Operations' Application, Troy Hotchkiss, could not describe why, from a technological perspective, Municipal Operations could not reasonably achieve a total phosphorus limit below 0.15 mg/L.[85] Under these conditions, considering the sensitivity of the receiving waters, the evidence demonstrates that the discharge as proposed with a limit of only 0.15 mg/L total phosphorus would create the reasonable potential for a violation of the Texas Surface Water Quality Standards. If a permit is to be issued, then a phosphorus limit of 0.02 mg/L would be more consistent with the guidance for the establishment of a phosphorus limit set forth in the IPs.

6. Nitrate Nitrogen

The Draft Permit includes no permit requirements to reduce nitrate nitrogen in the effluent or implement biological nitrogen reduction. The best available data demonstrates average nitrate-nitrogen concentration in Helotes Creek of 0.713 mg/L and a maximum

[82] Tr. Vol. 1 at 140:11 – 141:2.
[83] Ex. GEAA-120 at 12.
[84] Ex. GEAA-121 at 7-8.
[85] Tr. Vol. 1 at 159:1-25.

observed concentration of 2.51 mg/L.[86] Available data from treatment systems similar to that proposed by Applicant indicates that these systems can achieve nitrate concentrations ranging from 2 to 10 mg/L.[87] Systems that do not use this type of treatment system may produce effluent with nitrate concentrations as high as 30 mg/L.[88] Furthermore, without permit limitations for nitrate nitrogen, "the facility would likely be operated to maximize phosphorus uptake, at the expense of higher nitrate concentrations in the effluent," where there will be little to no dilution of the effluent in Helotes Creek directly downstream of the outfall.[89]

Increased nitrate concentrations can contribute to excessive algae, including cyanobacterial algae blooms, which contain toxins.[90] These conditions are exacerbated when additional phosphorus is also available in the water.[91] Furthermore, "[n]itrate toxicity also alters behavior, retards growths, disrupts endocrines and reduces the health, life span, and reproductive success of aquatic life."[92]

Dr. Price testified that compared to total phosphorus, "[n]itrogen participates in a more complex biogeochemical web of transformations that make it more difficult to link nitrogen loadings with aquatic community responses."[93] However, he performed no further analysis on the potential effects of increased nitrogen in the specific conditions of Helotes

[86] Ex. GEAA-100 at 26:8-11.
[87] Ex. GEAA-100 at 26:15-20.
[88] *Id.* at 26:20.
[89] *Id.* at 26:22-29.
[90] *Id.* at 27:1-4.
[91] *Id.*
[92] *Id.* at 27:11-13.
[93] App. Ex. 20 at 27:11-14.

Creek, where the effluent will receive little to no dilution. Neither the testimony presented by Dr. Price nor any other evidence supplied by the Applicant addresses the reasonable potential for nitrate permitted for discharge to result in unaesthetic conditions of Helotes Creek in violation of 30 Tex. Admin. Code § 307.4(b)(4).

7. CECs and PFAS

Municipal Operations and the ED largely ignored the presence of contaminants of emerging concern, including PFAS ("forever chemicals"), in the proposed effluent, arguing that, because specific regulatory standards have not been set for these chemicals, analysis of their impact on surface water, groundwater, and drinking water wells is "irrelevant." This analysis is based on a mischaracterization of applicable TCEQ Rules, as described below.

While no specific regulatory standards exist for Contaminants of Emerging Concern ("CECs"), including PFAS, consideration of the impacts of toxic substances is necessary under the TCEQ general criteria found at 30 Tex. Admin. Code § 307.4(d): "Surface waters must not be toxic to man from ingestion of water, consumption of aquatic organisms, or contact with the skin, or to terrestrial or aquatic life."

TCEQ further regulates toxic substances in surface water under Rule 307.6, requiring that water in the State subject to aquatic life use must:

> "not be chronically toxic to aquatic life" (30 Tex. Admin. Code § 307.6(b)(2)); and must
>
> "be maintained to preclude adverse toxic effects on aquatic life, terrestrial life, livestock, or domestic animals, resulting from contact, consumption of aquatic organisms, consumption of water,

> or any combination of the three" (30 Tex. Admin. Code § 307.6(b)(4)).

The impacts on human and aquatic health of one form of CECs, Per- and Polyfluoroalkyl substances ("PFAS"), in drinking water and surface water have been evaluated by the U.S. EPA. In April 2024, EPA established enforceable primary drinking water standards for CECs, including PFAS. 89 Fed. Reg. 32532. In December 2024, EPA established the Draft National Recommended Ambient Water Quality Criteria for PFAS. 89 Fed Reg. 105041. EPA's April 2024 Final Rule found that "animal toxicity studies have reported adverse health effects after oral HFPO-DA exposure, including liver and kidney toxicity and immune, hematological, reproductive, and developmental effects" and "may have an adverse effect on the health of persons." *Id.* at 32544. EPA's health advisories, which identify the concentration of chemicals in drinking water at or below which adverse health effects are not anticipated to occur, are: 0.004 parts per trillion (ppt) for perfluorooctanoic acid (PFOA), 0.02 ppt for perfluorooctane sulfonic acid (PFOS), and 2,000 ppt for potassium perfluorobutane sulfonate (PFBS). 87 Fed. Reg. 36848 (June 21, 2022). These EPA rules and guidance relevant to surface quality analysis because, under this rule, CECs such as PFAS are properly considered toxic substances under TCEQ Rules 307.4(d) and 307.6.

Dr. Crago testified that baseline concentration studies for pollutants such as PFAS and pyrethroids/fipronil (household insecticides) in wastewater effluent were not properly conducted by the Applicant to accurately evaluate potential environmental impacts.[94]

[94] Ex. GEAA-300 at 6:4-13.

Without baseline data from similar wastewater treatment facilities serving comparable household demographics, it is impossible to determine the extent to which these pollutants will enter the receiving waters and accumulate in the ecosystem.[95] Establishing such baseline concentrations is critical for predicting contamination levels in Helotes Creek and assessing the risks of chronic toxicity, bioaccumulation, and biomagnification in both aquatic and terrestrial species.[96] Therefore, he recommends incorporating data from existing wastewater treatment systems that draw a similar demographic, such as those in the Austin suburban region, to anticipate pollutant loads and ensure that appropriate regulatory safeguards are in place to protect the watershed.[97]

Ample evidence supports that PFAS are linked to health effects in aquatic animals, terrestrial animals, and humans. For example, Dr. Crago described that studies on Chironomid species (known as "mayflies") have demonstrated that PFOS exposure can significantly reduce survival, growth, and emergence, which raises concerns for the invertebrate species in the affected watershed.[98] CECs in the proposed effluent may also harm threatened and endangered species listed in the Southern Edwards Plateau Habitat Conservation Plan, including the Golden-cheeked Warbler, as well as karst invertebrates.[99] Furthermore, contaminants from the discharge could contribute to chronic toxicity through bioaccumulation and biomagnification, which can be particularly harmful during sensitive

[95] Ex. GEAA-300 at 6:14-20.
[96] Ex. GEAA-300 at 5:14-19.
[97] Ex. GEAA-300 at 6:14-20.
[98] Ex. GEAA-300 at 11:15-20.
[99] Ex. GEAA-300 at 8:5-8, 9:17-21.

life stages such as larval development and metamorphosis.[100] This means that CECs in the proposed effluent may impact species that Grey Forest citizens fish, observe, and enjoy in impoundments of Helotes Creek downstream of the proposed discharge

Regarding human health, exposure to PFAS can cause suppressed antibody response, high cholesterol, kidney or testicular cancer, and fertility issues.[101] PFAS compounds, known for their long half-lives, could biomagnify through the food chain, posing risks to bird species and potentially to human populations consuming contaminated wildlife.[102] It is worth remembering that the TSWQS prohibit waters from being toxic as a result of the *consumption* of aquatic organisms. 30 Tex. Admin. Code § 307.4(d). The proposed permit does not account for these risks, as the required testing does not measure PFAS levels or their long-term effects on the ecosystem.

Given the extensive testimony provided by Aligned Protestants on the impacts of CECs on water quality and their demonstration that CECs *are* regulated by TCEQ as toxic substances through the general criteria and through Rule 307.6, Aligned Protestants have rebutted the prima facie presumption that the discharge will not have the reasonable potential to result in a violation of the prohibition on toxicity set forth at 30 Tex. Admin. Code § 307.6(b)(4).

In contrast, Applicant's experts have sidestepped analysis of the impacts of CECs. For example, Applicant's biologist Dr. Price testified:

[100] *Id.* at 5:24-6:3.
[101] Ex. GEAA-100 at 21:28 – 22:1.
[102] Ex. GEAA-300 at 13:25 – 14:3.

> Depending on the particular material of concern, they [CECs] may or may not be present in domestic wastewater, may or may not be degraded during the treatment process or in the environment following discharge, and may or may not have any significant effect at levels present in receiving waters.[103]

This disregard for the toxic impacts of CECs and PFAS, despite the uncontroverted evidence that the discharge will potentially contain CECs and PFAS which may accumulate in toxic amounts, fails to rebut Aligned Protestants' demonstration that the issuance of the permit would violate TCEQ Rule 307.6, regulating toxic substances.

8. Protection of Groundwater Conditions

The Applicant has not demonstrated that the Draft Permit complies with statutory requirements and TCEQ rules to maintain groundwater quality, where the receiving waters are located in the Contributing Zone of the Edwards Aquifer, and the proposed plant is also directly over the Recharge Zone of the Trinity Aquifer. Based on site-specific conditions, contaminants from the wastewater discharge could quickly reach domestic wells and public water supply wells operated by Grey Forest Utilities, some of which are located within half a mile of the discharge point.

Under Tex. Water Code § 26.401(c)(1), it is State policy that "discharges of pollutants, disposal of wastes, or other activities subject to regulation by state agencies be conducted in a manner that will maintain present uses and not impair potential uses of groundwater or pose a public health hazard."

30 Tex. Admin. Code § 309.12 further requires that the "[t]he commission may not issue a permit for a new facility . . . unless it finds that the proposed site, when evaluated

[103] App. Ex. 20 at 29:18-23.

in light of the proposed design, construction or operational features, minimizes possible contamination of water in the state." In making this determination, the Commission may consider several factors, including "groundwater conditions such as groundwater flow rate, groundwater quality, length of flow path to points of discharge, and aquifer recharge or discharge conditions."

Dr. Ron Green provided extensive testimony that groundwater in the area of the proposed discharge is particularly sensitive to groundwater contamination. The receiving waters are located in the Contributing Zone of the Edwards Aquifer, which is hydraulically connected to the Recharge Zone, allowing minimally diluted contaminants to travel rapidly through the system at a rate of approximately one mile per day.[104] Helotes Creek shortly downstream of the discharge crosses a fault,[105] which may serve as a conduit for the movement of contaminants in the discharge into the groundwater.[106]

Due to this high transport rate, contaminants—including pathogens—will have limited time to be mitigated before reaching nearby groundwater wells, posing a significant risk to drinking water supplies.[107] Dr. Green noted that wells used for domestic supply at the Ann Toepperwein household and the Lynette Toepperwein Munson household are located within ½ mile of where Helotes Creek exits Guajolote Ranch, meaning that effluent discharged upstream of these wells could arrive at the wells within 1-2 days of the time of discharge.[108] Such domestic wells in the area are typically developed in the Upper Glen

[104] Ex. GEAA-200 at 5:15-21.
[105] Ex. GEAA-203.
[106] Ex. GEAA-200 at 7:13-18.
[107] Ex. GEAA-200 at 5:21-24.
[108] Ex. GEAA-200 at 11:14-17.

Rose (a component of the Trinity Aquifer) given that this aquifer has freshwater at a depth shallower than the Lower Glen Rose Aquifer.[109] His site inspection confirmed the presence of fractured bedrock and faults in the creek bed, which serve as conduits for contaminants to enter the aquifer.[110]

Both the shallow domestic wells, and the deeper Grey Forest Utility wells, are at risk of contamination. The shallow wells such as those owned by the Toepperwein household, are in a karst aquifer where the potential exists for a close connection with the downstream waters.[111] This creates a high likelihood that recharge that occurs in the creekbed will reach the groundwater wells near the creekbed.[112] While the wells owned by GFU are completed to a greater depth, the potential still exists for contaminants from the discharge to reach these wells due to the faults located between the wells and the discharge point.[113] This could occur in less than 24 hours.[114] The GFU wells are located within ¼ mile of Helotes Creek, "meaning that the contaminants will not have far to travel in order to move from the creekbed to the wells" in Dr. Green's words.[115]

The Executive Director and Applicant both claim that the protection of surface water will ensure the protection of groundwater. Yet, the surface water quality standards establish no limit on nitrate contained in the stream. The discharged effluent will contain

[109] Ex. GEAA-200 at 10:8-15.
[110] *Id.* at 7:21-8:10.
[111] Ex. GEAA-200 at 11:1-6.
[112] Ex. GEAA-200 at 11:7-9.
[113] Ex. GEAA-200 at 12:10-24.
[114] Ex. GEAA-200 at 12:23-24
[115] Ex. GEAA-200 at 12:22-23.

nitrate with no limit on the concentration or amount of nitrate discharged. [116] Nitrate is a contaminant subject to a primary drinking water standard of 10 mg/L, but in studies, nitrates in lower concentrations have been linked to increased risk of colorectal, bladder, and breast cancer, thyroid disease, diabetes, and birth defects.[117]

Given the potential for contaminants in the discharge to quickly reach the nearby groundwater wells with little dilution, the Draft Permit fails to adequately protect groundwater from potential contamination under Tex. Water Code § 26.401(c)(1) and Tex. Admin. Code § 309.12.

B. Issue B: Whether the draft permit is protective of wildlife, including endangered species, in accordance with the Texas Surface Water Quality Standards in 30 Tex. Admin. Code Chapter 307.

Independent of the protection of existing and attainable uses, the Water Quality Standards also contain general criteria which require the protection of wildlife. In particular, 30 Tex. Admin. Code § 307.6(4) provides that, "[w]ater in the state must be maintained to preclude adverse toxic effects on aquatic life, terrestrial life, livestock, or domestic animals, resulting from contact, consumption of aquatic organisms, consumption of water, or any combination of the three." When approving Texas' delegated authority to issue Texas Pollutant Discharge Elimination System permits, the EPA noted that this standard, "requires [TCEQ] to impose case-specific conditions in TPDES permits to protect aquatic and aquatic-dependent species (including listed species) from the toxic

[116] Ex. GEAA-100 at 26:12-25.
[117] Ex. GEAA-100 at 27:6-11.

effects of discharges when Texas' other toxic criteria and implementation procedures provide insufficient protection."[118]

Aligned Protestants' argument under Issue A: Water Quality, above, describes in detail that the limits (or lack thereof) in the Draft Permit for Total Phosphorus, Nitrate Nitrogen, Total Dissolved Solids, and CECs are insufficient to protect the fishable/swimmable quality of downstream waters. Furthermore, CECs, including PFAS, are considered "toxic substances."

The Applicant has failed to demonstrate that the Draft Permit is protective of wildlife, including the endangered and endangered karst invertebrates. The Applicant's Endangered Species Habitat Assessment Report performed by Pape-Dawson specifically states that "surface expression of karst invertebrate habitat was identified during the field visit."[119] In this assessment, Pape-Dawson identified solution channels in the vicinity of the discharge route including those designated as S-07, S-08, and S-09.[120] Applicant's investigation noted that both S-07 and S-08 extended down vertically.[121] The Executive Director's Standards Reviewer, Ms. Labrie, conceded that the possibility existed that solution cavity S-07 potentially extended to below the surface of the streambed of Helotes Creek.[122]

[118] State Program Requirements; Approval of Application to Administer the National Pollutant Discharge Elimination System (NPDES) Program; Texas, 63 Fed. Reg. 51164, 51197 (Sept. 24, 1998).
[119] App. Ex. 10 at APP000404.
[120] App. Ex. 10 at 418.
[121] App. Ex. 10 at 403.
[122] Tr. Vol. 3 at 73:3-17.

Dr. Price himself did not rule out the potential for karst invertebrates to have a significant likelihood of encountering or being adversely affected by the discharge.[123] He testified that the karst habitat features on the property may or may not have animals living in them, such as the spiders and beetles that have received attention in this matter.[124] Dr. Price admitted that he had no idea as to whether the karst features identified by Pape-Dawson extended to a depth below the level of the stream receiving the discharge.[125] Dr. Price admitted that he did not know how far karst features 7, 8, and 9 are from the receiving streambed.[126]

Applicant's expert Steve Paulson asserted in his direct testimony that the features identified by Pape-Dawson were "upstream and upslope of the discharge point."[127] Yet, under cross-examination, Mr. Paulson claimed that the discharge point is "probably" at the lowest point on the property.[128] He questioned the accuracy of the depiction of the location of the discharge point within the adjacent landowners map in the Application, and said that the location shown on the adjacent landowners map in the Application is not consistent with his understanding of the location of the discharge point.[129] At the same time, he, too, stated that he did not know how far beneath the ground the solution channels identified by Pape-Dawson extended.[130] When pressed to identify the location of the discharge point,

[123] App. Ex. 20 at 14:27 – 15:1.
[124] Tr. Vol. 2 at 145:24 – 146:2.
[125] Tr. Vol. 2 at 142:9-11.
[126] Tr. Vol. 2 at 148:14-19.
[127] App. Ex. 8 at 9:28-31.
[128] Tr. Vol. 1 at 276:20-23.
[129] Tr. Vol. 1 at 280:14-21, 282:8 – 283.7.
[130] Tr. Vol. 1 at 277:22 – 278:2.

Mr. Paulson said that "I'm not going to comment" and went on to say that "it doesn't really matter because wastewater does not affect these species."[131] In short, Mr. Paulson's opinion that species within the solution cavities would not be impacted was based upon a misunderstanding of the relative location of the solution channels and the discharge point, and a conclusory opinion that the wastewater would not harm the species.

This fails to rebut the potential harm to the species demonstrated by Dr. Crago, who testified that the proposed discharge would contribute to an increased presence of anthropogenic contaminants in the Helotes Creek Watershed downstream from the discharge site, and that such an increase in anthropogenic contaminants would be reasonably expected to lead to chronic toxicity to sensitive stages of karst invertebrates.[132] Dr. Crago noted that these species would potentially receive low-level chronic exposures due to the potential for effluent to infiltrate the surrounding underground aquifer.[133] As Dr. Crago noted, all available studies demonstrate the toxicity of PFOS (a type of PFAS) to ecologically important invertebrate species.[134]

For these reasons, the evidence demonstrates a reasonable potential for the discharge to result in a violation of 30 Tex. Admin. Code § 307.6(4) due to toxic impacts upon wildlife.

[131] Tr. Vol. 1 at 285:2-7.
[132] Ex. GEAA-300 at 5:16 – 6:3.
[133] Ex. GEAA-300 at 9:23 – 10:2.
[134] Ex. GEAA-300 at 11:17-19.

C. Issue C: Whether the draft permit adequately addresses nuisance odor, in accordance with 30 Tex. Admin. Code § 309.13(e).

Applicant's Motion for Summary Disposition was granted on this issue, and it will not be addressed further.

D. Issue D: Whether the draft permit complies with siting requirements regarding flood plains and wetlands, in accordance with 30 Tex. Admin. Code Chapter 309.

30 Tex. Admin. Code § 309.12 requires that the "[t]he commission may not issue a permit for a new facility . . . unless it finds that the proposed site, when evaluated in light of the proposed design, construction or operational features, minimizes possible contamination of water in the state." In making this determination, the commission may consider several factors, including "groundwater conditions such as groundwater flow rate, groundwater quality, length of flow path to points of discharge, and aquifer recharge or discharge conditions."

The argument under in Section III, Subsection H above describes the impact of the proposed effluent on groundwater conditions and groundwater quality in detail. For the reasons stated therein, the Draft Permit fails to adequately protect groundwater from potential contamination under Tex. Water Code § 26.401(c)(1) and Tex. Admin. Code § 309.12.

Furthermore, potential flooding is a characteristic of the site that must be considered under TCEQ Rule 309.12 as a "climatological condition." The historic flooding described by Kerry McEntire is directly attributable to the siting of the facility at this location. Mr. McEntire describes that Helotes Creek downstream of the proposed discharge at Scenic

Loop Road has risen over the low water crossing, and Helotes Creek at Sherwood Trail has risen six feet over the low water crossing.[135] The proposed treatment plant will add significant impervious cover to the land upstream of these areas, thus increasing the amount of runoff from the areas where that impervious cover is placed. Yet, no demonstration has been made that this addition of impervious cover upstream of areas already vulnerable to flooding impacts will not cause erosion and contamination of waters of the State.

This is an issue that goes to the sufficiency of the application, rather than a term of the permit. Therefore, the prima facie presumption does not apply to this issue. Even if the presumption *does* apply here, Aligned Protestants have submitted evidence that the Draft Permit does not comply with siting requirements under TCEQ Rule 309.12, and Applicant has failed to demonstrate by a *preponderance of the evidence* that the Draft Permit is nevertheless compliant.

E. Issue E: Whether Applicant substantially complied with applicable public notice requirements.

Applicant's Motion for Summary Disposition was granted on this issue, and it will not be addressed further.

F. Issue F: Whether the Applicant adequately identified the operator in the application.

Applicant's Motion for Summary Disposition was granted on this issue, and it will not be addressed further.

[135] Ex. GEAA-600 (Prefiled Direct Testimony of Kerry McEntire) at 7:17-21; Tr. Vol. 1 at 40:7-10.

G. Issue G: 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 TWC § 26.081.

Texas Water Code Section 26.0282 broadly states that a permit may be altered or denied based on "consideration of need:"

> In considering the issuance, amendment, or renewal of a permit to discharge waste, the commission may deny or alter the terms and conditions of the proposed permit, amendment, or renewal *based on consideration of need*, including the expected volume and quality of the influent and the availability of existing or proposed areawide or regional waste collection, treatment, and disposal systems not designated as such by commission order pursuant to provisions of this subchapter.
>
> Tex. Water Code § 26.0282.

Whether there is a "need" for a wastewater facility is directly dependent on the need for the housing development relied upon to justify the plant. Mayor Garro testified that the City of Grey Forest is built around Helotes Creek has historically prided itself in the development of extensive parklands, including a 28-acre wildlife sanctuary and greenspace along Helotes Creek downstream of the proposed discharge known as the "Scenic Loop Playground."[136] In fact, town's motto is "A Scenic Playground."[137] For this reason, Mayor Garro opined that there is "no need for such a dense development" at Guajolote Ranch's proposed location north of Grey Forest:

> The density of development would not only pollute our Superior Water System, it would also increase air and noise pollution with increased traffic. The development would create light pollution that destroys the privilege of enjoying the night sky and fundamentally destroys the foundational and generational purpose of the City of Grey Forest. Essentially, the City thinks

[136] Ex. GEAA-400 at 4:22 – 5:4.
[137] *Id.* at 4:11-12.

> the development would be contrary to the City's goals to preserve the natural resources and the natural environment in and around Grey Forest.[138]

The City also passed Resolution No. 2022-28R opposing the development of the Guajolote Ranch Tract Project.[139]

This testimony rebuts the prima facie presumption that the Draft Permit complies with the requirements of Texas Water Code Section 26.0282. Because the Applicant has failed to produce credible evidence that there is a need for this dense housing development, and thus a need for the proposed wastewater facility, it has failed to demonstrate that the Draft Permit complies with the requirements of Tex. Water Code § 26.028.

IV. Transcript Costs

The allocation of transcript costs is governed by 30 Tex. Admin. Code § 80.23(d), which requires consideration of:

> (A) the party who requested the transcript;
> (B) the financial ability of the party to pay the costs;
> (C) the extent to which the party participated in the hearing;
> (D) the relative benefits to the various parties of having a transcript;
> (E) the budgetary constraints of a state or federal administrative agency participating in the proceeding;
> (F) in rate proceedings, the extent to which the expense of the rate proceeding is included in the utility's allowable expenses; and
> (G) any other factor which is relevant to a just and reasonable assessment of costs.

Greater Edwards Aquifer Alliance is a local nonprofit organization that is participating on behalf of local members in order to ensure protection of valuable natural resources. Furthermore, the City of Grey Forest is a local government reliant upon

[138] *Id.* at 8:22 – 9:2.
[139] Ex. GEAA-403.

taxpayers for expenses incurred and should be spared the burden of transcript costs. The most Aligned Protestants stand to gain from the current proceedings is maintenance of the status quo.

On the other hand, Municipal Operations stands to gain considerable economic benefit from the proceedings and from the existence of the transcript. The transcript facilitates the creation of a record which the Applicant can use in its attempt to meet its burden of proof. For these reasons, no portion of the transcript costs should be allocated to Aligned Protestants, and transcript costs should be borne entirely by the Applicant.

V. Conclusion

For the reasons set forth above, Aligned Protestants respectfully request that the ALJs issue a Proposal for Decision recommending denial of the Application and assessment of all transcript costs against Applicant.

Respectfully submitted,

/s/ Eric Allmon
Eric Allmon
State Bar No. 24031819
eallmon@txenvirolaw.com
PERALES, ALLMON & ICE, P.C.
1206 San Antonio St.
Austin, Texas 78701
Tel: (512) 469-6000
Fax: (512) 482-9346

Counsel for Greater Edwards Aquifer Alliance and the City of Grey Forest

CERTIFICATE OF SERVICE

By my signature below, I certify that on March 11, 2025, a true and correct copy of the foregoing document was served upon the counsel of record listed below via electronic service.

/s/ Eric Allmon
Eric Allmon

FOR THE APPLICANT:
Helen S. Gilbert
John Manning
Barton Benson Jones, PLLC
7000 N. MoPac Expwy, Suite 200
Austin, Texas 78731
Telephone: (512) 565-4995
Telecopier: (210) 600-9796
hgilbert@bartonbensonjones.com
jmanning@bartonbensonjones.com

Sheridan Thompson
JST Law
sheridan@jst-law.com

FOR THE EXECUTIVE DIRECTOR:
Bradford Eckhart
Fernando Salazar Martinez
TCEQ Environmental Law Division
P.O. Box 13087, MC 173
Austin, Texas 78711-3087
Telephone No. 512-239-1283
Facsimile No. 512-239-0626
bradford.eckhart@tceq.texas.gov
fernando.martinez@tceq.texas.gov

FOR THE OFFICE OF PUBLIC INTEREST COUNSEL:
Josiah T. Mercer
TCEQ Office of Public Interest Counsel
P.O. Box 13087, MC 103
Austin, Texas 78711-3087
(512) 239-0579
josiah.mercer@tceq.texas.gov