SOAH DOCKET NO. 582-22-0585
TCEQ DOCKET NO. 2021-1001-MWD

APPLICATION OF CITY OF GRANBURY, FOR TPDES PERMIT NO. WQ0015821001	**§**	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

PROTESTANTS' EXCEPTIONS TO THE PROPOSAL FOR DECISION

July 11, 2022

SOAH DOCKET NO. 582-22-0585
TCEQ DOCKET NO. 2021-1001-MWD

APPLICATION OF CITY OF GRANBURY, FOR TPDES PERMIT NO. WQ0015821001	§ § § § §	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

PROTESTANTS' EXCEPTIONS TO THE PROPOSAL FOR DECISION

TO THE HONORABLE COMMISSIONERS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY:

Protestants Granbury Fresh, Victoria Calder, Stacy and James Rist, and Bennett's Camping Center & RV Ranch, collectively referred to herein as "Protestants," submit these exceptions to the Administrative Law Judges' ("ALJs") Proposal for Decision ("PFD") relating to the application by the City of Granbury ("Granbury" or "Applicant") for Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0015821001.

For the reasons presented below, Protestants urge the Commission to deny the permit requested by Applicant.

I. INTRODUCTION

The ALJs conclude in the PFD that Granbury "has met its burden of proof on all thirteen questions referred by the Commission."[1] In addressing the various issues presented, however, they fail to recognize that the draft permit falls well short of compliance with TCEQ rules, including the Surface Water Quality Standards (SWQS) and location standards to protect Texans from nuisance conditions.

Granbury has not demonstrated compliance with TCEQ rules intended to address odor. The proposed facility violates the clear and unambiguous language of the TCEQ rules by the placement of an un-aerated equalization basin within less than 500 feet of the nearest property line. Further, the proposed facility places a BNR *Anaerobic* Basin within less than 500 feet of the nearest property line based on an unreasonable finding that "anaerobic" somehow has a meaning in Chapter 309 of the TCEQ rules that is entirely different than the meaning of "anaerobic" in Chapter 285 of the TCEQ rules.

[1] Proposal for Decision, p. 93.

Granbury has further not demonstrated that the uses of receiving waters will be protected. In particular, Granbury has not demonstrated compliance with the applicable minimum dissolved oxygen standard of 5.0 mg/L. All modeling performed demonstrates dissolved oxygen levels lower than 5.0 mg/L. Documentation relied upon by the ALJs to justify acceptance of a variance explicitly states that such a variance was not found justified under circumstances such as those presented by this application. Furthermore, the ALJs place unjustified reliance upon modeling that was not performed under critical discharge conditions, contrary to all TCEQ precedent on the consideration of wastewater discharge permits. Modeling evidence improperly excluded by the ALJs only further demonstrates the deep flaws in the conclusions set forth in the PFD.

In addition, Granbury has not demonstrated compliance with the Tier 2 anti-degradation standards. The ED and Granbury failed to evaluate the impact of the 600%+ increase in phosphorus loading, the increase in an already troubled fecal coliform levels in the Creek and Cove, among other things.

The Applicant seems to allege that its permit must be granted because the permit is needed. To the degree that denial of the permit would create a hardship for the Applicant, that hardship is of the Applicant's own making. It is the Applicant that chose to pursue a permit for a site that *could not possibly meet the buffer zones* plainly set forth in the TCEQ rules. It is the Applicant that purposefully sought to add bacteria and nutrients to a waterway already impaired for bacteria that is extremely sensitive to nutrients without prior water quality modeling. Indeed, the Applicant did not even hire its modeler or environmental expert until after the draft permit was issued.[2] Issuance of the permit would violate the clear unambiguous language of several TCEQ rules, rendering any decision to issue the permit arbitrary and capricious. Poor decision making by the Applicant in seeking the requested permit should not justify an arbitrary decision by the Commission to grant the requested permit.

The Commission must correct the blatant violations of TCEQ rules in the draft permit. Because the Applicant failed to satisfy its burden regarding its applicable buffer zone requirement and the water quality modeling's compliance with applicable regulations, its permit must be denied. Otherwise, the Creek and Cove will be ruined for recreational use from the increase in bacteria and algae both aesthetically and from fish relocating or dying. Additionally, the Bennett's Camping Center and RV Ranch will suffer as a result of the odors from the proposed facility.

[2] Tr. V. 2, 402:18-21.

II. ARGUMENT

A. Nuisance Odors and Buffer Zone Requirements

1. Granbury proposes the location of an equalization basin that violates the required buffer zones.

a. TCEQ rules contain a conclusive presumption that *any* unaerated equalization basin is a "lagoon with zones of anaerobic activity."

Under the TCEQ rules, an unaerated equalization basin is logically and explicitly designated as a "lagoon with zones of anaerobic activity." In particular, TCEQ rules at 30 TAC § 309.13(e) state that:

> One of the following alternatives must be met as a compliance requirement to abate and control a nuisance of odor prior to construction of a new wastewater treatment plant unit… (1) **Lagoons with zones of anaerobic activity (e.g.,** facultative lagoons, **un-aerated equalization basins**, etc.) may not be located closer than 500 feet to the nearest property line. All other wastewater treatment plant units may not be located closer than 150 feet to the nearest property line.

This rule explicitly designates "un-aerated equalization basins" as examples of "lagoons with zones of anaerobic activity."[3] An item cannot be an example of a category while at the same time being excluded from the category. If apples are an example of fruit, then the establishment that an item is an apple also establishes that it is a fruit. There is good reason for this regulatory presumption that unaerated equalization basins are lagoons with zones of anerobic activity. Wastewater entering an equalization basin will have come directly from the wastewater collection system where it will have had limited contact with air. The evidence shows that the equalization basin at Granbury's plant will hold raw sewage from the collection system that will be anaerobic without having received any prior treatment.[4] In order to ensure adequate odor protection, the TCEQ rules reasonably and *conclusively* presume that such a basin is a lagoon with zones of anaerobic activity.[5]

The regulatory history of 30 TAC § 309.13 reflects the reason why the Commission would establish such a conclusive presumption. 30 TAC § 309.13(e) was first adopted in 1989 and, at that time, only included "facultative lagoons" as exemplars of "lagoons with zones anaerobic

[3] BLACK'S LAW DICTIONARY, defining "*e.g.*" as "for example" (11th ed. 2019).
[4] Tr. V. 2, 182:7-24.
[5] **Attachment A** to this Brief.

activity" subject to a 500-foot buffer zone.[6] Later, as facultative/oxidation pond technology was phased out and systems using equalization basins became more widespread, the rule was amended to explicitly identify "un-aerated equalization basins" as examples of "lagoons with zones of anaerobic activity."[7] This ensured that the TCEQ rules would continue to be protective against odor impacts even as treatment technologies changed.

b. The undisputed evidence establishes that the permit authorizes an unaerated equalization basin at the facility within less than 500 feet of the nearest property line.

There is no genuine dispute that the permit authorizes an equalization basin that will be unaerated. Mr. Berryhill, witness for the City of Granbury, stated in his direct testimony that:

> There are two un-aerated areas in the proposed East WWTP. The first un-aerated area is the proposed temporary flow equalization (EQ) basin[.][8]

Mr. Berryhill further confirmed under cross-examination that the permit authorized operation of the equalization basin in an un-aerated manner:

> Q: [E]ven if operated consistent with the representations in the application, could the permit -- could the facility operators still operate the equalization basin in a manner that was unaerated?
> A: I believe so[.][9]

No party has disputed that the unit at issue is an equalization basin, nor has any party disputed that it is located within less than 500 feet of the nearest property line.

Considering that the TCEQ rules require that all unaerated equalization basins be located at least 500 feet from the nearest property line, the proposed configuration of this unit violates the requirements of the TCEQ rules.

c. The assumption of short residence time fails to justify exempting the unaerated equalization basin (or BNR anaerobic basin) from the 500-foot buffer zone of 30 TAC § 309.13(e).

The ALJs' finding that the unaerated equalization basin is not a lagoon is largely based on a conclusion that 30 TAC § 309.13(e) applies only to units where wastewater resides for extended

---

[6] 14 Tex. Reg. 4892 (1989) (to be codified at 30 TAC § 309.13) (Tex. Water Commission).
[7] 22 Tex. Reg. 12676, 12681 (1997) (to be codified as an amendment to 30 TAC § 309.13(e)) (Texas Natural Resource Conservation Commission).
[8] COG Ex. 300, 27:10-12.
[9] Tr. V. 2, p. 322 (testimony of Joshua Berryhill on behalf of Granbury). *See also* COG Ex. 300, 27:11-12 ("The first un-aerated area is the proposed temporary flow equalization (EQ) basin…")

periods of time, and on the ALJs' unquestioning acceptance of Mr. Berryhill's opinion that sewage must be resident in a container for more than 48 hours before it produced foul odor. This is contrary to the law and the evidence.

TCEQ rules contain no limitation on 30 TAC § 309.13(e) for a unit with a residence time of less than 48 hours. The sole basis that the ALJs cite for such an exemption is Mr. Berryhill's opinion. That opinion is directly contrary to federal guidance on the question. The United States Environmental Protection Agency has published a technical report on the "Direct Environmental Factors as Municipal Wastewater Treatment Works."[10] Within that guidance, the USEPA stated that, "Even *fresh* wastewater and *digested sludge* have odors which, although not objectionable to environmental engineers or treatment plant operators, are often unacceptable to the general public."[11] Directly contrary to Mr. Berryhill's testimony, the EPA went on to note that *either* fresh *or* septic wastewater are potential sources of wastewater odors.[12] Mr. Berryhill's conclusory opinion is simply not adequate justification to create an implied exception to the explicit language of the TCEQ rules that is contrary to EPA's comprehensive technical study of the question.

The creation of such an unwritten exemption for short residence time would have implications for all wastewater treatment facilities, thereby having an impact under similar circumstances for parties beyond this case, and thus would constitute an *ad hoc* rulemaking in violation of the Texas Administrative Procedure Act.[13]

2. The BNR *Anaerobic* Basin is a lagoon with zones of *anaerobic* activity proposed to be located less than 500 feet from the nearest property line in violation of the TCEQ rules.

The ALJs wrongly conclude that the BNR *anaerobic* basin is not subject to the 500-foot buffer zone requirement of 30 TAC § 309.13(e) based upon findings that wastewater resides within the basin for too short a period to be considered a "lagoon", and a rather quizzical interpretation of the term "anaerobic" that is directly contrary both to the name of the unit and the meaning of the term "anaerobic" as used in the TCEQ rules.[14]

The ALJs' interpretation of the term "lagoon" as dependent upon the residence time of liquid within a unit is unreasonable. As discussed above, any assumption that wastewater must reside

[10] Ex. GF-1, pp. 14-15 (emphasis in original).
[11] Ex. GF-1, pp. 14-15 (emphasis in original).
[12] Ex. GF-1, p. 15.
[13] *Tex. State Bd. of Pharmacy v.* Witcher, 447 S.W.3d 520, 528 (Tex. App. – Austin, 2014) *pet. denied*.
[14] PFD, p. 19.

within a container for an extended period of time in order to produce odor is contrary to EPA's comprehensive study of odor production at wastewater treatment plants. Furthermore, rules are to be interpreted under traditional principles of statutory construction.[15] Under those principles, where a term is undefined, it is typically given its ordinary meaning.[16] In this case, the term "lagoons with zones of anaerobic activity" is only defined by example to include facultative lagoons, unaerated equalization basins, and "etc."[17] The term "lagoon," itself, is not separately defined. Thus, it is proper to look to the ordinary meaning of the term. Merriam-Webster's Dictionary defines the term "lagoon" to include, "a shallow artificial pool or pond (as for the processing of sewage or storage of a liquid)."[18] This definition in no way limits the status of an artificial pond as a lagoon based upon residence time. The ALJs' finding that "lagoons" only include units containing stagnant or standing water is contrary to this definition, as well as contrary to the intent of the rules to provide protection against foul odors.

The Executive Director's staff processing of this application reflected a position by the staff that the BNR Anaerobic Zone is a "lagoon" as that term is used in 30 TAC § 309.13(e)(1). The TCEQ Permit Specialist for the matter, Mr. Gordon Cooper, on May 7, 2019 wrote Granbury's engineers to say that the 500-foot buffer zone would apply to the anaerobic basin if the basin was allowed to "go septic." While staff improperly exempted the BNR Anaerobic Zone from the requirements of § 309.13(e)(1) based upon operational representations by Granbury, the Executive Director's staff never found that the BNR Anaerobic Zone was not a lagoon. The Executive Director's Closing Arguments make no contention that the BNR Anaerobic Zone is not a lagoon.

Furthermore, the ALJs' finding that the BNR anaerobic basin does not contain anaerobic zones is contrary to the meaning of the term "anaerobic" under the TCEQ rules. In applying the terms "aerobic" and "anaerobic" under Chapter 309 in this case, those terms should be given the same meaning as they are given elsewhere in the TCEQ rules. Chapter 285 of the TCEQ rules establishes a clear and logical threshold as to the line between "aerobic" and "anaerobic." It would be nonsensical for these terms to mean one thing in Chapter 285, and another in Chapter 309, but that is precisely what the City of Granbury has asserted, and is the approach proposed by the ALJs.

---

[15] *TGS-NOPEC Geophysical Co. v. Combs,* 340 S.W.3d 432, 438 (Tex. 2011).
[16] *Id.*
[17] 30 TAC § 309.13(e)(1).
[18] https://www.merriam-webster.com/dictionary/lagoon (last accessed June 30, 2022).

In particular, Chapter 285 identifies "aerobic" processes as those occurring *in the presence of free oxygen*.[19] On the other hand, "anaerobic" processes are those occurring *in the absence of free oxygen*.[20] In other words, by TCEQ rule, the threshold between aerobic and anaerobic conditions turns on the presence (or absence) of *free oxygen*. Mr. Berryhill, on behalf of the City of Granbury, sought to move this threshold by testifying that "anaerobic" conditions are those that have "zero oxygen whatsoever not any – no free dissolved oxygen, *nor* any bound oxygen."[21] The ALJs are correct that this is a very specific line. But, by the plain language of the TCEQ rules, it is the *wrong* line. This is critically important, because the BNR Anaerobic Zone will operate in the border area where no free dissolved oxygen is present, but bound oxygen is present.[22] This area is *both* anaerobic and anoxic.[23] The ALJs treat these as mutually exclusive terms, which they are not.

Just as a statute must be interpreted as a whole,[24] the TCEQ regulations must be interpreted as a whole. If TCEQ were to adopt the definition of "anaerobic" that has been applied by the ALJs to the BNR Anaerobic Zone, then the term "anaerobic" will have one meaning when used in Chapter 309 of the TCEQ rules, while having a different meaning when used in Chapter 285 of the TCEQ rules. Such interpretive gymnastics are necessary to conclude that an anaerobic basin does not contain anaerobic zones. The Commission should apply a consistent meaning of the term "anaerobic," and recognize that the BNR Anaerobic Basin at the proposed facility contains zones of anaerobic activity.

Because the BNR Anaerobic Basin is, thus, properly considered a lagoon with zones of anaerobic activity, that unit is properly subject to a 500-foot buffer zone. Yet, the BNR Anaerobic Basin is located less than 500 feet from the nearest property line. Accordingly, the placement of the BNR Anaerobic Basin is in violation of the TCEQ rules, and the permit application must be denied.

---

[19] 30 TAC § 285.2(1) (Defining "aerobic digestion" as "The bacterial decomposition and stabilization of sewage in the presence of free oxygen.") (Chapter 285 governs TCEQ regulation of on-site sewage facilities).
[20] 30 TAC § 285.2(3) (Defining "anaerobic digestion" as "The bacterial decomposition and stabilization of sewage in the absence of free oxygen.")
[21] Tr. V. 2, p. 257.
[22] Admin Record-0300 (notably, no showing has been made that the BNR system can sufficiently remove phosphorus to meet the applicable effluent limits if only operated within this range).
[23] Ex. GF-300, p. 9.
[24] *Jaster v. Comet II Construction, Inc.,* 438 S.W.3d 556, 562 (Tex. 2014).

The failure to comply with the 500-foot buffer zone has real consequences as can be seen from the image below[25] showing the Bennett's RV Ranch and the adjacent property proposed to be used by Granbury.

B. Water Quality

1. The modeling of dissolved oxygen performed by both the Executive Director and the Applicant demonstrates noncompliance with the applicable dissolved oxygen limit of 5.0 mg/L.

A primary question with regard to the sufficiency of the water quality modeling and the protection of water quality is whether the City of Granbury has demonstrated compliance with the applicable dissolved oxygen limit of 5.0 mg/L contained in the Texas Water Quality Standards.[26] The requested permit cannot be issued if the authorized discharge would cause or contribute to a violation of this water quality standard.[27]

No party disputes that the modeling performed by the Executive Director produces predicted dissolved oxygen levels of less than 5.0 mg/L in the receiving waters. The DO values predicted in QUAL-TX modeling performed by both the ED and the Applicant, with predicted

[25] Ex. Bennett 2 at 6.
[26] Ex. ED-5; 30 TAC § 307.7(b)(3)(A)(i).
[27] 30 TAC § 305.538, incorporating by reference 40 C.F.R. § 122.4.

values as low as 4.81 mg/L, all fall below the DO criteria of 5.0 mg/L for receiving waters Rucker Creek and/or Lake Granbury. James Michalk conducted the only modeling performed by the ED. This modeling indicated DO in the Lake Granbury segment of the receiving waters would be 4.81 mg/L as a result of this discharge in the final phase.[28] Tim Osting, an expert witness for Granbury, also conducted QUAL-TX modeling. His uncalibrated runs resulted in a predicted DO concentration of 4.81 mg/L in the mid-cove of Rucker Creek.[29]

Despite these predictions, the ALJs take unjustified comfort that somehow 4.80 mg/L is *close enough* to 5.0 mg/L, asserting that a 2008 modeling study performed by the TCEQ Water Quality Assessment Team justifies the allowance for such a variance.[30]

Ironically, the study cited by the Executive Director, and now the ALJs, explicitly states that it was unable to find that a 0.20 mg/L variance is justified for facilities with chemical biological oxygen demand ($CBOD_5$) limits of 20 mg/L or 30 mg/L (which is the type of permit proposed by Granbury) which frequently discharge nutrients in concentrations in excess of the permit limits.[31] This was because ammonia-nitrogen limits are generally included in such permits as a result of DO modeling (which is the case for Granbury's draft permit), and the facilities are not truly designed to denitrify in a way that would achieve the nitrogen limits.[32] Partly for this reason, the 2008 study relied upon by the ALJs states that use of a 0.2 mg/L allowance, "may not be appropriate for permits with BOD_5 or $CBOD_5$ concentration limits of 30 mg/L."[33]

The draft permit for the City of Granbury falls into this exception from the study, since the draft permit contains a $CBOD_5$ concentration limit of 30 mg/L,[34] and an ammonia-nitrogen limit that was strengthened as a result of DO modeling.[35] Neither Granbury nor the Executive Director acknowledge this limitation of the 2008 study relied upon for their allowance of a 0.2 mg/L variation from the 5.0 mg/L standard set forth in the rules.

Equally significant, when revised to conform with TCEQ guidance, the modeling approach adopted by Mr. Osting further illustrates that the QUAL-TX modeling performed by the ED is tremendously overly optimistic. Mr. Osting's prefiled testimony (provided after submission of

[28] Ex. ED-18, p. 3.
[29] COG Ex. 604.
[30] PFD, p. 45.
[31] Ex. ED-24, p. 6.
[32] Ex. ED-24, p. 4.
[33] Ex. ED-24, p. 14.
[34] Admin Record-0114.
[35] Ex. ED-13, p. 0014.

Protestants' prefiled testimony) included modeling that made several changes to the inputs to more closely match the circumstances downstream of the discharge. Mr. Osting adjusted the barometric pressure to match the topography near the receiving waters,[36] and used data from the Texas Water Development Board to change the depths and widths of the segments located inside Lake Granbury to more accurately reflect actual conditions.[37] When he ran the model using these more accurate inputs, he produced the DO results that indicated a minimum level of 4.95 mg/L.[38] The ALJs rely upon this modeling as if it supports their finding of compliance with the water quality standard requiring a minimum DO of 5.0 mg/L.[39]

What the ALJs do not disclose is that, at the hearing on the merits, Mr. Osting admitted that he had made a fundamental error in the performance of this modeling. When the depths of the receiving waters significantly change, it is necessary to also change the value used for the "reaeration rate."[40] In layman's terms, the reaeration rate is the level of oxygen exchange between the atmosphere and a water body.[41] The reaeration rate depends upon the depth of the water body at issue, with deeper water bodies having lower reaeration rates.[42] TCEQ's Implementation Procedures state that reaeration rates are among the "most important model inputs."[43] Yet, Mr. Osting's modeling made significant changes to the Executive Director's assumed depths of the receiving waters without making changes to the assumed reaeration rates.[44] Mr. Osting admitted that he did not know what the results of the modeling would be if adjusted reaeration rates were used.[45] Mr. Osting further admitted that if the model were run using adjusted depths *and reaeration rates* the predicted dissolved oxygen could potentially be less than 3.0 mg/L.[46]

In violation of the Texas Administrative Procedure Act and the TCEQ rules, the ALJs refused to admit Protestants' evidence regarding the significance of Mr. Osting's error.[47] It is undisputed that Mr. Osting's modeling at issue did not even exist on the date that Protestants'

---

[36] COG Ex. 600, p. 19.
[37] *Id.*
[38] COG Ex. 607.
[39] PFD, p. 41.
[40] Tr. V. 2, 353:19-21 and 360:16-19.
[41] Tr. V. 2, p. 353; Ex. ED-3, p. 85.
[42] *Id.*
[43] Ex. ED-3, p. 84.
[44] Tr. V. 2, p. 362.
[45] Tr. V. 2, p. 368.
[46] Tr. V. 2, p. 369.
[47] Tr. V. 3, 490:2-3.

prefiled testimony was due.[48] It was only after submission of Protestants' testimony that this modeling now relied upon by the ALJs was submitted.[49] In light of this new modeling, Protestants moved that either the additional modeling be struck from the record, or that Protestants be allowed the opportunity to present evidence responding to Mr. Osting's additional modeling[50] – a request that was renewed at the hearing on the merits.[51] The ALJs denied this request.[52] Thus, Protestants presented their rebuttal testimony on this issue in the form of an Offer of Proof so that the Commission and, if necessary, a reviewing court can see that Mr. Osting's new data actually demonstrates that the ED's modeling is overly optimistic.

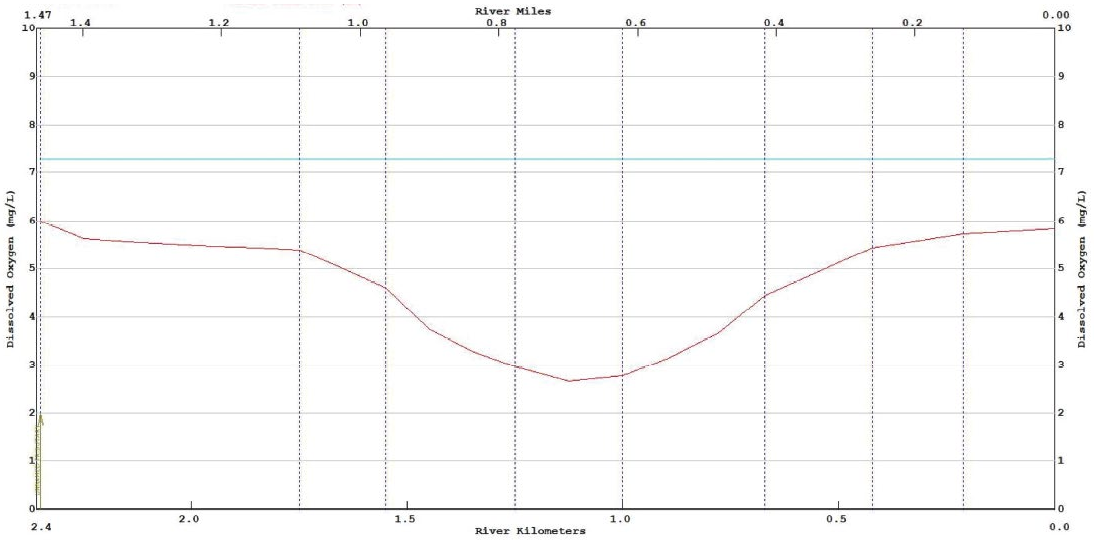
Protestants were entitled to present responsive evidence pursuant to both the Texas Administrative Procedure Act, and the TCEQ rules. In particular, the Texas APA provides that "each party is entitled to an opportunity... to respond to and to present evidence and argument on each issue involved in the case."[53] Allowing the City of Granbury to present modeling that did not even exist at the time of Protestants' prefiled case, without an opportunity for rebuttal, denied Protestants this opportunity. The TCEQ rules provide that, "[a]ny party may present a rebuttal case when another party presents evidence that could not have been reasonably anticipated."[54] Here, Protestants could not have anticipated the new modeling that Granbury's experts performed, and the precise nature of the significant mistakes that modeling would contain.

The Commission should reverse the ALJs' refusal to allow the presentation of evidence and testimony responsive to Granbury's new modeling and should fully consider the rebuttal testimony and evidence presented by Protestants during the hearing.

In testimony the ALJs refused to admit, James Machin performed additional QUAL-TX modeling with utilized the adjusted parameters presented by Mr. Osting, while also appropriately adjusting the reaeration rates for the modeling. Mr. Machin's adjustment of the reaeration rates complied with normal TCEQ practice and policy regarding use of the model, unlike Mr. Osting's modeling identified by the ALJs in the PFD, which failed to comply with normal TCEQ practice

[48] Tr. V. 2, p. 375.
[49] Applicant's deadline for prefiled testimony was February 18, 2022. These documents were provided to Protestants on February 20, 2022 – 16 days after Protestants' deadline for prefiled testimony.
[50] Protestants' Objections to Applicant's Prefiled Testimony and Exhibits, Motion to Strike, and Alternatively, Motion for Continuance and Leave to File Rebuttal Testimony, February 24, 2022.
[51] Tr. V. 3, 475:19 – 477:24.
[52] Tr. V. 3, 490:2-3.
[53] Tex. Gov't Code § 2001.051.
[54] 30 TAC § 80.117(b).

and policy.[55] Mr. Machin's compliant modeling demonstrated that the dissolved oxygen levels in the receiving waters would drop to concentrations of *less than 3.0 mg/L* as a result of the discharge:[56]



Predicted Downstream Dissolved Oxygen Concentrations, with corrected depths and reaeration rates[57]

This modeling, in combination with the 2008 TCEQ study findings, demonstrates that, far from being conservative, the modeling performed by the Executive Director and relied upon by the ALJs is overly optimistic. That modeling is premised upon assumptions for barometric pressure, the geometry of the receiving waters, and the pollutant content of the discharge that all would tend to produce a higher dissolved oxygen result than will happen in reality. The actual impact of the discharge, as fully permitted, is more likely to result in a dissolved oxygen level closer to the ultimately modeled level of 2.8 mg/L, than the 4.81 mg/L modeled by the Executive Director.

[55] Offer of Proof, pp. 498-499.
[56] Offer of Proof, 497:17:22.
[57] Ex. GF-8 (Offer of Proof).

The ALJs reference Mr. Osting's QUAL2K modeling, but that modeling is irrelevant because it did not address critical conditions. The Implementation Procedures provide that proper modeling must be conducted under "critical conditions."[58] The IPs go on to say that:

> Critical conditions are those combinations of environmental conditions and wastewater inputs that typically result in the lowest dissolved oxygen levels in a water body. Critical conditions are defined by three primary parameters: ambient flow, wastewater flow, and ambient water temperature.[59]

For wastewater flow, critical conditions are the contaminant concentrations at the average flow *limits* of the permit.[60] For ambient flow, critical conditions are the seven-day, two-year low-flow (7Q2) quantities.[61] Mr. Osting's QUAL2K modeling was based upon "typical" wastewater pollutant concentrations[62] – not the permit limits, and thus did not reflect critical conditions for wastewater. Furthermore, the QUAL2K model only predicts values for the day of data upon which it is calibrated. Thus, the QUAL2K runs only predict what the downstream concentrations would be if the discharge had occurred on September 15, 2021,[63] which was not demonstrated to have conditions the same as critical conditions for all relevant receiving streams.

The City of Granbury bears the burden of proof in this matter. All quantitative modeling performed in this case under critical conditions produces results indicating that operation of the facility in compliance with the conditions of the permit will result in dissolved oxygen concentrations in the receiving waters that are less than the 5.0 mg/L minimum standard set forth in the Texas Water Quality Standards. Accordingly, it has not been demonstrated that the discharge from the proposed facility will not cause or contribute to a violation of the Texas water quality standards. The permit must be denied.

2. **The Evidence and Law do not support the ALJs' position that Granbury's proposed plant will not cause excessive algae growth (relating to Issues B, D, I, and H) and Granbury has not demonstrated that the proposed permit will not cause more than a de minimis degradation of receiving waters, as required by 30 TAC § 307.5(b)(1).**

[58] Ex. ED-3, p. 86.
[59] *Id.*
[60] Ex. ED-3, p. 86; Tr. V. 2, p. 348.
[61] Ex. ED-3, p. 86.
[62] COG Ex. 611, Tables 8 and 9.
[63] Tr. V. 2, p. 371.

Even without the benefit of time to prepare for Applicant's testimony and the inability to rebut Applicant's witnesses, Protestants submit the Applicant has failed to make its case that the water quality of Rucker Creek and Cove will not be degraded beyond a de minimis amount and that excessive algae growth will not negatively impact recreation. Rucker Creek and the Lake Granbury segment of the receiving waters are classified as having high aquatic life use under the TCEQ rules, and therefore TCEQ's decision on Granbury's permit application is subject to a Tier 1 and Tier 2 anti-degradation review.[64] The Tier 1 review (preservation of attainable uses) has been discussed above**.** The Tier 2 anti-degradation policy requires that high quality waters not be degraded absent a showing that degradation is necessary for important social or economic development.[65] A lowering of water quality may constitute degradation even if existing uses are not impaired, with "degradation" defined by rule as a lowering of water quality by more than a *de minimis* amount.[66] The baseline water quality for a Tier 2 review – from which *de minimis* would properly be determined - is the highest water quality sustained in the receiving water since November 28, 1975.[67] While the ALJs note that the TCEQ rules and EPA requirements require the baseline for evaluation to begin in 1975, they argue that the IPs state that existing conditions can be used as a baseline unless there is information indicating that degradation has occurred since November of 1975.[68] The IPs are not rules and recognize that the rules supersede the IPs.[69] The IPs do not state that adherence to any procedure set forth in the IPs demonstrates compliance with the requirements of a Tier 2 review. Further, the Granbury Watershed Protection Plan noted that, "Results of the data evaluation also indicate that there is an increasing trend in nutrients in the main body of Lake Granbury."[70] This clearly indicates that higher water quality for nutrients was previously sustained in Lake Granbury. Yet, no determination of historic water quality for nutrients within Lake Granbury or Rucker Creek and Cove has been made.[71] This is the Applicant's burden to overcome, not the Protestants'.

---

[64] 30 TAC § 307.5(b)(2); *Save Our Springs Alliance, Inc. v. Texas Commission on Environmental Quality*, No. D-1-GN-19-003030 (345th Dist. Ct., Travis County, Tex. Oct. 29, 2020), p. 5.
[65] 30 TAC § 307.5(b)(2).
[66] *Id.*
[67] 30 TAC § 307.5(c)(2)(B) (November 28, 1975 is apparently the date on which Texas first adopted water quality standards under the 1972 amendments of the federal Clean Water Act, thus reflecting the goal of avoiding degradation of water quality subsequent to adoption of the standards).
[68] Ex. ED-3, p. 63.
[69] Ex. ED-3, p. 12 ("This document should be interpreted as guidance and not as a replacement to the rules.").
[70] Ex. GF-306, p. 17.
[71] Tr. V. 1, 118:1-3.

TCEQ's IPs also provide for a parameter-specific consideration of degradation, with parameters of potential concern for a Tier 2 review explicitly including dissolved oxygen, bacterial indicators of recreational suitability, nutrients, as well as "any other *constituents* that could lower water quality."[72]

The ALJs throughout their PFD gave great weight to Granbury's use of Mr. Osting's QUAL2K model that Mr. Flores used to determine whether the ED's antidegradation review was accurate and whether there will not be excessive algae growth, among other things. This is despite the fact that there is no Commission precedent *ever* in *any* water quality permitting matter where a permit was issued based upon modeling that did not consider critical discharge concentrations. Modeling such as the QUAL2K modeling performed by Mr. Osting does not reflect the potential impact of the fully authorized discharge. This fact, alone, renders Mr. Osting's QUAL2K modeling irrelevant.

The ALJs believe the QUAL2K model was scientifically validated.[73] ED witness Mr. Michalk stated that QUAL-TX was used in Texas WWTP permitting and he was aware of only one use of QUAL2K by TCEQ for a waste load evaluation on Oyster Creek. He stated that it is a very complex model.[74] Mr. Michalk stated that calibrating a model can be problematic "[i]f you can't see any trends in water quality because there aren't currently any wastewater discharges."[75] He further stated, "the validity of the calibration can come into question as well as its usefulness as a predictive tool and that's especially the case where you're in a section where there aren't currently any discharges and you're trying to extrapolate that model, calibrated model into a scenario that would represent potential future discharge conditions."[76] There are not any existing discharges in Rucker Creek or Cove. Admittedly, Mr. Michalk was referring to calibrating the QUAL-TX model but from Mr. Osting's testimony, it is clear that the calibration for QUAL2K would be much the same.[77] **So, it is far from Protestants' "bald assertion that QUAL2K is not sufficiently reliable for use for permitting purposes" as stated by the ALJs.[78] Protestants'**

[72] Ex. ED-3, pp. 61 – 62 (emphasis added).
[73] PFD, p. 53.
[74] Tr. V. 1, 168:1-9 and 169:4-9.
[75] **Tr. V. 1, 149:16-18.**
[76] Tr. V. 1, 149:13-25.
[77] Tr. V. 2, 346:4-24.
[78] PFD, p. 67.

concerns about the QUAL2K model and indeed all the modeling performed by the Applicant are, despite what the ALJs believed, well founded.

As discussed, the ALJs ignored or disregarded all evidence that the QUAL2K model was not calibrated beyond one day (if at all) and did not use critical conditions or loadings and therefore was unreliable. The ALJs noted that the model was adjusted or calibrated for September 15, 2021 and was used to make various runs and various conclusions Protestants' witness, Mr. Frossard, testified that the model at best was only reliable for that one day under those conditions. Mr. Frossard has over 40 years' experience in the water quality and environmental field mainly employed by a large water district and has many years of experience in developing water quality rules to protect his employer's reservoirs. Part of his employment involves reviewing wastewater permits for discharges into his employer's reservoirs. He has worked with many models including the ones being used in this proceeding. He even lives very close to Rucker Creek and Cove and has a boat on the Cove itself. He crosses Rucker Creek most every workday. Because of the ALJs' rulings and the requirement that Protestants must file their prefiled case before seeing the Applicant's prefiled case, Mr. Frossard (and Protestants' other witnesses for that matter) had very limited ability to testify about the QUAL2K model and its results pertaining to Granbury's anti-degradation and water quality evidence including cyanobacteria.

Both the Executive Director and Granbury recognized phosphorus loadings and resultant algal growth would be a problem and cause a degradation to water quality. Mr. Paull said his recommended effluent phosphorus limits "should help" prevent the excess accumulation of algae. Mr. Paull also recognized the discharge will be in a sensitive site.[79] Granbury's witness Mr. Flores agreed that there needed to be a phosphorus limit "to try and reduce nutrient loading in Rucker Creek and Rucker Creek Cove".[80] Mr. Flores even admits that the modeling done by Mr. Osting shows there will be lowering of water quality for DO, ammonia, phosphorus, chlorophyll-a and bottom algae, but goes on to say without evidentiary support that it does not exceed Rucker Creek's assimilative capacity because the predicted concentrations do not exceed species-specific thresholds.[81]

[79] Ex. ED-11, p. 0011.
[80] COG Ex. 700, p. 19.
[81] COG Ex. 700, p. 37.

There are many problems with Mr. Flores' testimony. Most of his opinions are based on Mr. Osting's flawed water quality modeling. Further, TCEQ's IPs make it clear that when dealing with Phosphorus and Nitrogen the examination involves whether significant elevations of algae and growth of aquatic vegetation *themselves* are expected to occur, *not* negative impacts to site specific species.[82] COG Exhibit 706, "Nutrient and biological assessment of the Blanco River, 2019", is discussed positively in Mr. Flores' prefiled testimony,[83] but dismissed as a subjective opinion in his live testimony.[84] Dr. Ryan King, the report's author, concluded that his tests showed nuisance algae proliferated between 20 and 35 micrograms per liter of TP (Total Phosphorus) and he believed his results are very similar in Texas streams.[85] Mr. Flores' ANALAB samples showed that the baseline phosphorous levels are already beyond being a problem for nuisance algae growth according to Dr. King's report. For example, Mr. Flores took a water sample No 2061982 on Rucker Creek that had a phosphorus level of 115 micrograms per liter, and another at No. 2061980 on Rucker Cove that had a phosphorus level of 118 micrograms per liter – all well in excess of the levels that Dr. King's report said caused nuisance algae.[86] The ALJs dismiss this analysis from an exhibit sponsored by the Applicant by stating the Mr. Flores stated that "bottom algae is beneficial to fish communities." Recall that there are many types of algae that are of concern not just what is represented by Mr. Flores "bottom algae." Further, common sense tells you that nuisance algae goes beyond being beneficial to fish communities and certainly is detrimental to recreation and aesthetics. To make matters worse, Granbury's proposed discharge will be permitted to add more than 1.5 tons of phosphorus per year or a 600% increase of phosphorus into a tributary of Rucker Creek,[87] without appreciable dilution[88]. The ALJs' acceptance of Mr. Flores statement that the Creek and Cove do not currently reflect the already high phosphorus loadings ignore what the Lake Granbury Watershed Protection Plan illustrated - that the coves do not respond to pollutant loads as the whole body of the reservoir does.

The ED's application review does not help the Applicant's case. The ED failed to perform any analysis or modeling to determine the impact from nutrient loading to the receiving waters.[89]

---

[82] Ex. ED-3, pp. 65-66.
[83] COG Ex. 700, p. 34.
[84] Tr. V. 2, pp. 417-420.
[85] COG Ex. 706, p. 10.
[86] COG-027519 – COG-027521 (test results by David Flores disclosed by the City of Granbury).
[87] Ex. ED-7, pp. 2 & 2a (8.3 lb/d is equivalent to 3,029.5 lb/year, which is equivalent to 1.515 tons/year).
[88] Ex. GF-500, 19:12-18.
[89] Ex. GF-500, pp. 16-18.

Mr. Paull did not make a baseline review of Rucker Creek for nutrients.[90] He couldn't answer whether the phosphorus limits he established would prevent significant growth of algae.[91] He further stated that, despite being aware of another permit granted by the TCEQ with a lower phosphorus effluent set, he used the standard set.[92] The ED's phosphorus limit is based upon TCEQ policy and worksheets, and not impact analysis of the specific stream. This methodology develops a point system to lead the staff to decide to require nutrient limits or not. It does not determine or analyze the limit necessary to protect the receiving waters.[93] In the methodology utilized by the ED for analysis of TP, all that was accomplished was a determination that TP will cause an impact. Whether the 1.0 or the 0.5 mg/L TP limit is adequate to protect the receiving waters cannot be determined.[94] Therefore, there is no information developed or provided to make the determination that "the draft permit will provide adequate protection for aquatic life." Mr. Paull, after reviewing his checklists, found that no significant degradation of water quality would occur in Rucker Creek *if* the requirements in the draft permit were met, including his suggested phosphorus limit.[95] In other words, there would be more than a *de minimis* impact to water quality if the Granbury permit did not have a phosphorus limit. Yet, Mr. Paull did not determine whether the phosphorus limits imposed were sufficient to avoid a more than *de minimis* impact to water quality. Again, nothing in the IPs states that the imposition of such a limit will prevent a more than *de minimis* impact on water quality, nor do the IPs state that the inclusion of such a limit satisfies the requirements of a Tier 2 review.

In Mr. Frossard's review, he determined the Executive Director's staff conducted the nutrient screening analysis using the volume of Lake Granbury to predict nutrient loading in Rucker Creek Cove (Lake Granbury is obviously much larger than Rucker Creek Cove and nutrients from the Granbury discharge would be significantly diluted).[96] Mr. Frossard performed the same analysis using the actual dimensions of Rucker Creek Cove and identified that total phosphorous in the Cove would increase 651% as a result of the interim phase of the discharge.[97] The ALJs recite statements from the ED and Mr. Osting that attempt to whitewash the fact that the

[90] Tr. V. 1, 118:1-3.
[91] Tr. V. 1, p. 127.
[92] Tr. V. 1, p. 143.
[93] ED's Closing Arguments, p. 13.
[94] Ex. GF-500, pp. 21-22.
[95] ED's Closing Arguments, p. 13; Ex. ED-11, p. 0010; Tr. V. 1, pp. 121-128.
[96] Ex. GF-500, 18:22 - 19:11.
[97] Ex. GF-500, 19:15-17; 20:8-15.

ED looked at Lake Granbury itself instead of Rucker Cove to minimize the impact of Phosphorus loadings from the proposed discharge, that is, a 2.09% increase of Phosphorus in Lake Granbury versus a 651% increase in loadings in Rucker Creek Cove. Mr. Osting's QUAL2K model, even if properly calculated, does not show what impact these increased loadings will cause. The QUAL2K model when properly run would show concentrations of nutrients in the wastewater at a point in time averaged throughout the entire lake, not the impact of these loadings entering a constrained cove or even a lake over time. Based upon the ED's own standards, they should have performed additional analysis on impacts of a 651% increase in Phosphorus to Rucker Creek Cove. The Applicant's burden of proof on this point has not been satisfied.

Mr. Flores makes a statement that the assimilative capacity is part of the Tier 2 review.[98] Protestants discuss this interpretation in their Closing Arguments and do not agree, believing instead that the changes to water quality should be the focus.[99] The ED witnesses did not state that this was the correct way to interpret antidegradation review because the ED did not determine the assimilative capacity of Rucker Creek or Cove for nutrients. However, even if true, no effort was made, or evidence provided, to determine what the assimilative capacity of Rucker Creek and Rucker Creek Cove are. The only modeling provided by the Applicant, as discussed above, was proved to be flawed and it also was only calibrated to one day and did not use critical conditions. The statement that the "result of the proposed discharge will not exceed the assimilative capacity of the waterbodies therefore will be insignificant---*i.e.,* de minimis"[100] cannot be substantiated or confirmed since the information needed to support this claim is not available.

The modeling undertaken by stopped halfway or less into the Cove. There was no modeling flawed or otherwise by Granbury to support the statement that the discharge is expected to have beneficial effects on chlorophyll-a in the whole Cove. Indeed, the chlorophyll-a projections are more likely a feature of the flawed model than anything else. During drought conditions the only flow into this Cove will be the flow from the plant which at maximum flow will be less than 4 cubic feet per second - surely not enough to flush the algae that will be created into the Lake.

[98] COG Ex. 700, 37:10-20.
[99] Protestants' Closing Arguments, pp. 24-25.
[100] Granbury's Closing Arguments, pp. 39-40.

Protestants also believe that the draft permit needs a limit on the quantity of total nitrogen ("TN") which may be discharged.[101] The ED did not look at TN despite testimony that this nutrient has the potential to become the driving constituent for excessive algae growth.[102] The ED has analyzed TN as a nutrient causing excessive algae growth in other TPDES permits.[103] In addition, Mr. Frossard noted that nitrogen in the discharge will become readily available for algal uptake.[104] Not only did TCEQ underestimate the extent of nutrient loading likely to occur, Mr. Frossard notes that TCEQ did not model or analyze the potential of the discharge to cause health risks from Cyanobacteria (a type of algae).[105] Mr. Osting's model, as stated by the ALJs, only addressed bottom algae and not Cyanobacteria or the common nutrient algae found in Texas water bodies. No cove modeling was performed to evaluate the impact of the increased loading of Nitrogen and Phosphorus. Mr. Frossard's analysis provides additional evidence that the proposed discharge is not only a Tier 2 violation, but it shows that Granbury has failed to prove that the health of the requesters and their families, livestock, and wildlife will not be protected. Mr. Frossard testified that in his opinion the Executive Director did not consider potential health impacts from harmful algal blooms.[106] Unquestionably, with what is known today, this discharge will be a catastrophe for the biologic and recreational values of Rucker Creek and Rucker Cove. This change is much more than a *de minimis* impact to water quality.

3. **Granbury has failed to demonstrate that the proposed permit will not impair presumed recreational uses of Rucker Creek by raising *E. coli* levels above the regulatory criteria of 126 CFU/100ml required to protect those uses and has thus failed to demonstrate compliance with 30 TAC §§ 305.531, 307.5(b)(1), and 307.4(j)(1).**

Lake Granbury is designated by TCEQ regulation as subject to primary contact recreation uses.[107] Lake Granbury also is designated under the TCEQ regulations as subject to public water supply use.[108] The criteria for the protection of primary contact relevant standard for a Tier 1 analysis for *E. coli* bacteria is 126 colony-forming units per 100 ml (hereinafter "126 CFU") in the

[101] Ex. ED-7, p. 2
[102] Ex. GF-500, p. 21, 29:14-20.
[103] Ex. GF-507, p. 6.
[104] Ex. GF-500, 21:14.
[105] Ex. GF-500, 13:23 - 14:2; Tr. V. 1, 58:20-25.
[106] Ex. GF-500, 9:16.
[107] 30 TAC § 307.10(1) Appendix A (Segment 1205).
[108] 30 TAC § 307.10, Appendix A (Segment 1205).

receiving waters.[109] In addition, 30 TAC § 307.4(j)(1) separately requires that "attainable uses of aquatic recreation must be maintained, as determined by criteria that indicate the potential presence of pathogens." The draft permit sets an effluent limit of 126 CFU for the effluent in both the interim and final phase.[110]

Bacterial contamination has been a recognized problem in the coves of Lake Granbury, leading to development of the Lake Granbury Watershed Protection Plan in 2010.[111] That Plan noted that, "Periodic elevated concentrations of *E. coli* and fecal coliform bacteria have been found in the coves of Lake Granbury, causing a failure to meet the criteria for contact recreation use."[112] The Plan went on to note that, "The coves are shallow, dead-end bodies of water with little mixing or interaction with the main body of the reservoir."[113] One finding in the Plan was that, "Bacteria loading reductions within the isolated drainage areas of identified areas can significantly impact bacteria levels in identified areas."[114] Historical TCEQ water quality sampling from Rucker Creek Cove demonstrate numerous exceedances of the 126 CFU/100 ml water quality standard, with concentrations of *E. coli* measured at amounts as high as 6,100 CFU/100 ml.[115]

Steve Esmond, P.E., one of Protestants' experts and an engineer with approximately 40 years of experience in in civil and environmental engineering[116] reviewed the draft permit, EPA's guidance document for recreational water quality criteria, the Lake Granbury Watershed Protection Plan ("WPP"), and historic water quality sampling by TCEQ.[117] Mr. Esmond opined that the discharge of wastewater at a volume of 2.0 million gallons per day with a concentration of 126 CFU would aggravate the historical recurrence of elevated levels of bacteria, including *E. coli*, in the coves of Lake Granbury, including Rucker Creek Cove.[118] Mr. Esmond also had a heightened concern over the bacteria concentrations because of the public water supply intake being located relatively shortly downstream of the proposed discharge.[119] *E. coli* in water indicates

[109] *See* Admin Record-0185 (Lake Granbury segment of receiving waters is assigned the use of primary contact recreation); 30 TAC § 307.7(b)(1)(A)(i).
[110] Admin Record-0114.
[111] Ex. GF-306.
[112] Ex. GF-306, p. 11.
[113] *Id.*
[114] *Id.*
[115] Ex. GF-300, 15:1-4; Ex. GF-307.
[116] Ex. GF-300, 4:15.
[117] Ex. GF-300, 5:11 – 6:21.
[118] Ex. GF-300, 14:8 - 15:4.
[119] Admin Record-0352.

human pollution and the possible existence of other bacteria and infectious biological agents.[120] Mr. Esmond testified that with 126 CFU/100 ml of *E. coli,* you can expect that 36 of 1,000 primary contact recreators will become ill.[121] *E. coli* levels exceeding 126 CFU/100 ml have been measured in TCEQ sampling in Rucker Creek.[122] Adding more polluted discharge water with 126 CFU/100 ml of *E. coli* into Rucker Creek can be expected to lead to gastrointestinal illnesses among a not insignificant number of recreators, such as members of Granbury Fresh who regularly recreate in the Creek.

The only modeling of *E. coli* concentrations in the receiving streams was performed by Tim Osting on behalf of Granbury. That QUAL-2K model predicted an *E. coli* concentration of 0 CFU in Rucker Creek *with* the discharge. While the ALJs considered this prediction determinative, his modeling was not based upon critical conditions for the wastewater, since it assumed an *E. coli* concentration in the discharge of no more than 1 CFU, rather than the 126 CFU allowed by the permit.[123] Applicant's own sampling showed 70 CFU in Rucker Creek in September of 2021 *without the discharge*. Thus, Granbury's modeling of *E. coli* concentrations in the receiving waters is neither relevant nor credible.

Granbury also has not demonstrated that the lowering of bacterial water quality will be less than *de minimis.* The quality of the receiving waters with respect to bacteria has clearly been degraded over the years, as reflected by the Watershed Protection Plan that noted, "[i]n 1993, a cooperative study between the Texas Water Commission, the Brazos River Authority (BRA) and the Hood County Health Unit first identified an **increase** in fecal coliform levels in the lake."[124] Despite this official acknowledgment that bacterial levels have worsened since 1975, no determination was made of the highest water quality for *E. coli.* since November 28, 1975, nor did the Executive Director or Granbury attempt to make that determination in considering Granbury's application.[125] Without such a determination, the extent of the lowering of water quality from the baseline cannot be determined, and it cannot be said that the discharge will result in a less than *de minimis* lowering of bacterial indicators of recreational suitability in comparison to baseline water quality. In fact, Jeff Paull, who the Executive Director presented as having performed the Tier 2

[120] Ex. GF-300, 12:15-18.
[121] Ex. GF-305, p. 34 (EPA Recreational Water Quality Criteria).
[122] Ex. GF-300, 15:4.
[123] COG Ex. 610; COG Ex. 611.
[124] Ex. GF-306, p. 17.
[125] Tr. V. 1, 132:4-13.

anti-degradation review,[126] testified that he did not know whether the permit would prevent a more than *de minimis* lowering of water quality with respect to *E. coli*:

> Q: So what was that Tier 2 review that you did with regard to *E. coli*?
>
> A: So it's asking if water quality with respect to *E. coli* in this case will be lowered by more than a de minimis amount.
>
> (Simultaneous discussion)
>
> Q: And it's asking -- well, go ahead.··Let me -- I apologize.
>
> A: Yeah.··Applying a, you know, the *E. coli* limits to the -- **your permit should help protect water quality from dropping below our criteria.**
>
> **Q: Will it prevent water quality by being lowered by more than a de minimis amount?**
>
> **A: I don't know.**
>
> **Q: With regard to *E. coli*, what constitutes a greater than de minimis change?**
>
> **A: I don't know.** [127]

Granbury presented Mr. Flores to testify as to whether issuance of the permit would comply with TCEQ's Tier 2 anti-degradation requirements.[128] With regard to *E. coli*, Mr. Flores' analysis went no further than that of the Executive Director's staff – who could not even say whether the proposed discharge would result in a more than de minimis lowering of water quality with regard to bacteria.

Granbury has not demonstrated that the proposed permit includes effluent limits sufficient to protect the water quality standards in the receiving waters, as required by 30 TAC § 305.531(4), nor has Granbury demonstrated that the proposed discharge will be protective of existing uses of the receiving waters with regard to bacteria, as required by of 30 TAC § 307.5(b)(1) and 307.4(j)(1).

C. There is no evidence that the proposed plant will be used by Granbury to move area residents from on-site sewerage to a regional wastewater facility.

[126] Ex. ED-11, 14:27 – 15:7.
[127] Tr. V. 1, 130:12 – 131:6.
[128] COG Ex. 700, 25:18 – 28:8.

Mr. Osting stated that the proposed plant is consistent with the WPP recommendation that on-site sewage facilities needed to be minimized in favor of wastewater treatment plants. The ALJs believe that Granbury intends to use this plant to help accomplish this goal.[129] There is no evidence to support that Granbury intends to connect existing on-site sewage users to this plant.

D. Transcript Costs

The ALJs propose splitting transcript costs between Granbury and the Protestants "on a 50/25/25 basis."[130] But Applicant should bear the entirety of the transcript costs. Though Granbury did not request the transcript itself, it specifically requested a one-day turnaround time for the court reporting service to provide Granbury with a copy of each day's transcript, resulting in the high cost of $8,053.05. Protestants ordered an entirely separate copy from the court reporting service, with a slower turnaround time, and thus incurred transcript costs of their own. Protestants did not benefit from the one-day turnaround time of the Applicant's copy and as such should not bear the burden of the high cost that the Applicant willingly chose to take on. Protestants participated efficiently in the hearing, presenting five witnesses in comparison to the eight witnesses presented by Granbury – one of which Protestants waived cross-examination for. Additionally, Granbury has a significantly greater ability to pay, as a municipality, in comparison to the ability of Protestants as a small non-profit association of landowners, and a small business.

III. CONCLUSION

Because the draft permit has failed to demonstrate compliance with TCEQ buffer zone requirements and the Texas Surface Water Quality Standards, as discussed above, Protestants urge the Commission to deny the requested permit.

Respectfully submitted,

/s/ Eric Allmon
Eric Allmon
Texas Bar No. 24031819
eallmon@txenvirolaw.com

PERALES, ALLMON & ICE, P.C.

[129] PFD, p. 25.
[130] PFD, p. 92.

1206 San Antonio St.
Austin, Texas 78701
Tel: (512) 469-6000
Fax: (512) 482-9346

Counsel for Protestants
Granbury Fresh and Victoria Calder

AND

/s/ Michael J. Booth
Michael J. Booth
State Bar No. 02648500
mjb@baw.com

BOOTH & ASSOCIATES, P.C.
5701 W. Slaughter Lane, Suite A130
Austin, Texas 78749
(512) 472-3263 (t)
(512) 473-2609 (f)

Counsel for Protestants
Bennett's Camping Center & RV Ranch, and
Stacy and James Rist

CERTIFICATE OF SERVICE

I do hereby certify that a true and correct copy of the above and foregoing document has been forwarded by email to the following counsel of record, on July 11, 2022.

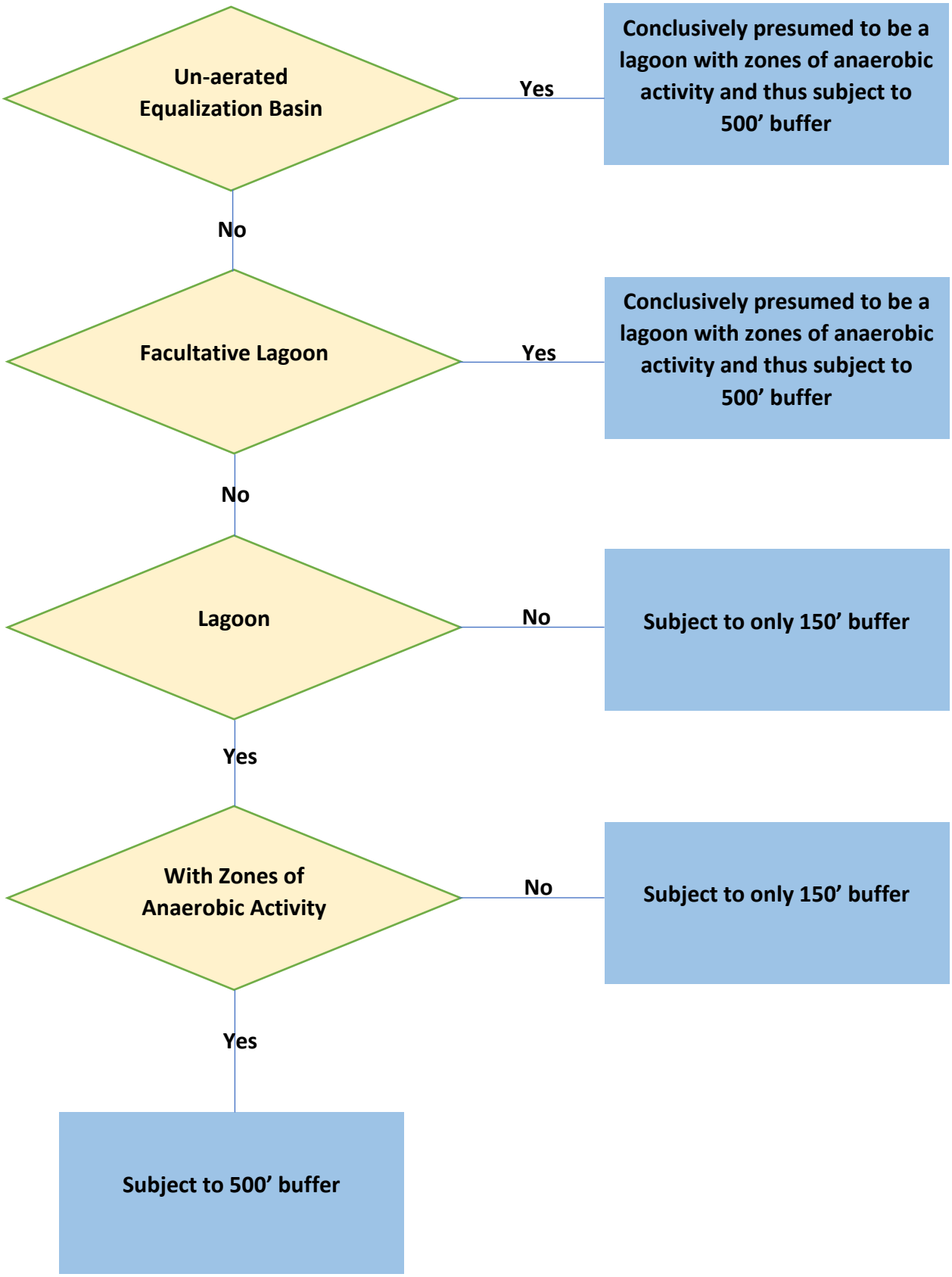
/s/ Eric Allmon
Eric Allmon

FOR THE CITY OF GRANBURY:
Jason Hill
J.T. Hill, PLLC
3508 Far West Boulevard, Suite 170
Austin, Texas 78731
(512) 806-1060
jason@jthill.com

FOR THE EXECUTIVE DIRECTOR:
Anthony Tatu
Mattie Isturiz
Texas Commission on Environmental Quality
Environmental Law Division, MC-173
P.O. Box 13087
Austin, Texas 78711-3087
(512) 239-0600
Anthony.tatu@tceq.texas.gov
Mattie.isturiz@tceq.texas.gov

FOR THE OFFICE OF PUBLIC INTEREST COUNSEL:
Garrett T. Arthur
Office of Public Interest Counsel
P.O. Box 13087, MC-103
Austin, Texas 78711
(512) 239-5757
garrett.arthur@tceq.texas.gov

ATTACHMENT A


Un-aerated Equalization Basin
Yes
Conclusively presumed to be a lagoon with zones of anaerobic activity and thus subject to 500' buffer
No
Facultative Lagoon
Yes
Conclusively presumed to be a lagoon with zones of anaerobic activity and thus subject to 500' buffer
No
Lagoon
No
Subject to only 150' buffer
Yes
With Zones of Anaerobic Activity
No
Subject to only 150' buffer
Yes
Subject to 500' buffer