State Office of Administrative Hearings

Kristofer S. Monson
Chief Administrative Law Judge

March 26, 2024

Aubrey Pawelka, TCEQ Attorney
Jennifer Jamison, OPIC Attorney
Helen Gilbert, Applicant's Attorney
Emily Rogers, Protestants' Attorney

VIA EFILE TEXAS

RE: SOAH Docket 582-23-23818; TCEQ Docket 2023-0844-MWD
Application of Highland Lakes Midlothian I, LLC
for New TPDES Permit No. WQ15999001

Dear Parties:

Please find attached a Proposal for Decision in this case.

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

All exceptions, briefs, and replies, along with certification of service to the above parties and the ALJ, shall be filed with the Chief Clerk of the TCEQ electronically at http://www14.tceq.texas.gov/epic/eFiling/ or an original and seven copies may be filed with the Chief Clerk of the TCEQ. Failure to provide copies may be grounds for withholding consideration of the pleadings.

CC: Service List

SOAH Docket No. 582-23-23818

TCEQ Docket No. 2023-0844-MWD

BEFORE THE
STATE OFFICE OF ADMINISTRATIVE HEARINGS

APPLICATION OF HIGHLAND LAKES MIDLOTHIAN I, LLC FOR NEW TPDES PERMIT NO. WQ15999001

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TCEQ Docket No. 2023-0844-MWD

BEFORE THE
STATE OFFICE OF ADMINISTRATIVE HEARINGS

APPLICATION OF HIGHLAND LAKES MIDLOTHIAN I, LLC FOR NEW TPDES PERMIT NO. WQ15999001

PROPOSAL FOR DECISION

Highland Lakes Midlothian I, LLC (Applicant) filed an application (Application) with the Texas Commission on Environmental Quality (TCEQ or Commission) for new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0015999001 to discharge treated domestic wastewater from a proposed wastewater treatment facility (Facility) to be located in Ellis County, Texas. The Administrative Law Judge (ALJ) of the State Office of Administrative Hearings (SOAH) recommends the Application be granted and the Draft Permit (as issued by the Executive Director (ED) of the Commission on September 30, 2022) be finalized and issued without changes.

I. NOTICE, JURISDICTION, AND PROCEDURAL HISTORY

There are no contested issues of notice or jurisdiction in this case;[1] therefore, those matters are addressed solely in the findings of fact and conclusions of law in the Proposed Order attached to this Proposal for Decision (PFD).

Applicant filed the Application on May 25, 2021. On April 26, 2023, Applicant requested that the Commission directly refer the Application to SOAH for a contested-case hearing. The Commission referred the case on July 20, 2023. On October 2, 2023, SOAH ALJ Pratibha J. Shenoy convened a preliminary hearing via videoconference and admitted the following as parties: Applicant; the ED; the TCEQ Office of Public Interest Counsel (OPIC); and the City of Midlothian, the City of Waxahachie, and Ellis County (collectively, Protestants). By order dated October 23, 2023, the ALJ adopted the parties' agreed list of five issues.

On January 4, 2024, the ALJ convened a prehearing conference followed by the hearing on the merits, both via videoconference. Applicant was represented by attorneys Helen S. Gilbert, Randall B. Wilburn, and Kerrie Qualtrough. Attorneys Aubrey Pawelka and Allie Soileau represented the ED; attorney Jennifer Jamison represented OPIC; and Protestants were represented by attorneys Emily Rogers and Kimberly G. Kelley. The hearing concluded the same day. At the prehearing conference, the ALJ granted Applicant's motion for summary disposition on three issues. In post-hearing briefs, Protestants urged reconsideration with respect to one

[1] Protestants raised an issue with respect to notice of the Application. However, no party questioned whether there was adequate notice of the hearing or that SOAH has jurisdiction over this case.

issue, whether the Application was properly noticed. The record closed with the filing of written reply briefs on February 1, 2024.

II. APPLICABLE LAW

A. BURDEN OF PROOF

Applicant, as the moving party, bears the burden of proof by a preponderance of the evidence.[2] The Application was filed after September 1, 2015, and the Commission referred it under Texas Water Code section 5.557, which governs direct referral of environmental permitting cases to SOAH.[3] Therefore, this case is subject to Texas Government Code section 2003.047(i-1)-(i-3),[4] which provides:

> (i-1) In a contested case regarding a permit application referred under Section. . .5.557 [of the] Water Code, the filing with [SOAH] of the application, the draft permit prepared by the executive director of the commission, the preliminary decision issued by the executive director, and other sufficient supporting documentation in the administrative record of the permit application establishes a prima facie demonstration that:
>
> (1) the draft permit meets all state and federal legal and technical requirements; and
>
> (2) a permit, if issued consistent with the draft permit, would protect human health and safety, the environment, and physical property.

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[2] 30 Tex. Admin. Code § 80.17(a); 1 Tex. Admin. Code § 155.427.

[3] Tex. Water Code §§ 5.551(a), .557.

[4] Tex. Gov't Code § 2003.047(i-1)-(i-3), added by Acts 2015, 84th Leg., R.S., ch. 116 (S.B. 709), §§ 1 and 5, eff. Sept. 1, 2015.

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

(1) relates to a matter referred under Section 5.557, Water Code . . .; and

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

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

Although this law creates a presumption, sets up a method for rebutting that presumption, and shifts the burden of production on that rebuttal, it does not change the underlying burden of proof. The burden of proof remains with 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.[5]

In this case, the Application, the Draft Permit, and the other materials listed in Texas Government Code section 2003.047(i-1), which are collectively referred to as the "Prima Facie Demonstration," were offered and admitted into the record at the preliminary hearing on October 2, 2023.

[5] 30 Tex. Admin. Code § 80.17(a), (c).

B. WASTEWATER DISCHARGE PERMIT REQUIREMENTS

Chapter 26 of the Texas Water Code requires a person who seeks to discharge wastewater into Texas waters to file an application with TCEQ pursuant to filing requirements in 30 Texas Administrative Code, chapter 305, subchapter C. TCEQ reviews the applications in accordance with 30 Texas Administrative Code chapter 281. Based on a technical review, TCEQ prepares a draft permit that is consistent with U.S. Environmental Protection Agency (EPA) and TCEQ rules and a technical summary that discusses the application facts and significant factual, legal, methodological, and policy questions considered while preparing the draft permit.

A domestic wastewater treatment facility in Texas is subject to wastewater discharge permit requirements. Standard requirements, which TCEQ has adapted specifically for use in such permits, are found in 30 Texas Administrative Code, chapter 305, subchapter F. All wastewater discharge permits are also subject to regulations found in 30 Texas Administrative Code, chapter 319, which require the permittee to monitor effluent and report the results as required in the permit.

Finally, TCEQ has adopted water quality standards applicable to wastewater discharges in accordance with section 303 of the Clean Water Act and section 26.023 of the Texas Water Code. These standards, known as the Texas Surface Water Quality Standards (TSWQS), are found in 30 Texas Administrative Code chapter 307. The TSWQS identify appropriate uses for the state's surface waters (e.g., aquatic life, recreation, and public water supply), and establish narrative and numerical water quality standards to protect those uses. TCEQ has standard procedures for implementing the TSWQS, referred to as the Implementation

Procedures (IPs), which are approved by the EPA.[6] The TSWQS and IPs are used in reviewing permit applications.

TCEQ has not adopted numeric criteria for nutrients in streams and rivers, so they are evaluated based on the general narrative criteria for nutrients and the antidegradation rules. Those general narrative criteria are that the nutrients must not cause excessive growth of aquatic vegetation that impairs uses of the waterbody.[7] The factors to be considered in this determination include the proposed discharge flow rates, instream dilution, substrate type, depth, stream type, shading, impoundments, water clarity, sensitivity to aquatic vegetation growth, existing water quality concerns and impairments, and consistency with other permits in the area.[8]

The TSWQS also require that proposed wastewater discharges undergo an antidegradation review.[9] Antidegradation review is divided into two tiers. Tier 1 requires that "[e]xisting uses and water quality sufficient to protect those existing uses must be maintained."[10] Tier 2 is more stringent and generally prohibits the lowering of water quality by more than a de minimis amount for waters that exceed fishable/swimmable quality.[11]

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[6] 30 Tex. Admin. Code § 307.2(e); *see also* ED Ex. JL-3.

[7] 30 Tex. Admin. Code § 307.4(e).

[8] ED Ex. JL-1 at 17.

[9] 30 Tex. Admin. Code § 307.5(b).

[10] 30 Tex. Admin. Code § 307.5(b)(1).

[11] 30 Tex. Admin. Code § 307.5(b)(2). An exception (permitting lowering of water quality based on a showing that it is needed for important economic or social development purposes) is inapplicable here.

III. OVERVIEW OF PROPOSED FACILITY

The Facility will be located approximately 2.7 miles southwest of the intersection of East Farm-to-Market Road 875 and Farm-to-Market Road 663, in Ellis County, Texas.[12] The treated effluent will be discharged into an unnamed tributary; then to South Prong Creek; then to the Soil Conservation Service (SCS) Site 17 Reservoir (SCS 17 Reservoir); then to South Prong Creek; then to Lake Waxahachie (Segment No. 0816 of the Trinity River Basin).[13] The designated uses for Lake Waxahachie are primary contact recreation, high aquatic life use, and public water supply.[14] The presumptive uses for the unclassified portions of the receiving water are intermittent, minimal aquatic life use for the unnamed tributary; intermittent with perennial pools, limited aquatic life use for South Prong Creek; and perennial, high aquatic life use for the SCS 17 Reservoir.[15]

The Draft Permit provides for three phases: Interim I, Interim II, and Final, and would authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 0.30 million gallons per day (MGD) in Interim I, 1.20 MGD in Interim II, and 2.76 MGD in the Final phase.[16] The Facility will be an activated sludge process plant operated in the conventional mode. Treatment units will include: a bar screen, two aeration basins, two final clarifiers, an aerobic sludge

[12] App. Ex. 1 at 269.

[13] App. Ex. 1 at 251.

[14] ED Ex. JL-1 at 12.

[15] ED Ex. JL-1 at 13.

[16] The description of the Facility in this paragraph is taken from Applicant Exhibit 1 at 219-23.

digester, and a chlorine contact chamber in Interim I; a bar screen, five aeration basins, four final clarifiers, two aerobic sludge digesters, and a chlorine contact chamber in Interim II; and a bar screen, nine aeration basins, seven final clarifiers, four aerobic sludge digesters, and two chlorine contact chambers in the Final phase.

Based on modeling by the ED's reviewers, the Draft Permit sets the following effluent limits, based on a 30-day average, for five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia nitrogen (NH_3-N), total phosphorus (TP), and minimum dissolved oxygen (DO), all expressed in milligrams per liter (mg/L), and for E. coli, expressed in colony forming units (CFU) or most probable number (MPN) per 100 milliliters (ml):[17]

Draft Permit Effluent Limits						
	$CBOD_5$	**TSS**	**NH_3-N**	**TP**	**Minimum DO**	**E. coli (CFU/MPN)**
Interim I	10 mg/L	15 mg/L	3 mg/L	1 mg/L	4.0 mg/L	126
Interim II	5 mg/L	12 mg/L	2 mg/L	1 mg/L	4.0 mg/L	126
Final	5 mg/L	5 mg/L	1 mg/L	0.5 mg/L	6.0 mg/L	126

IV. DISCUSSION

The parties' agreed issues are:

1. Whether the Draft Permit is adequately protective of water quality, including the protection of surface water in South Prong Creek and Lake Waxahachie, in accordance with applicable regulations including the Texas Surface Water Quality Standards.

[17] App. Ex. 1 at 149-51.

2. Whether the permit should be altered or denied based on Applicant's experience as a facility and system operator.

3. Whether the application is substantively complete.

4. Whether the application was properly noticed.

5. Whether a permit, if issued consistent with the Draft Permit, would protect human health and safety, the environment, and physical property, relating to the discharge of emerging contaminants in the effluent.[18]

The administrative record established a prima facie demonstration that: (1) the Draft Permit meets all state and federal legal and technical requirements; and (2) a permit, if issued consistent with the Draft Permit, would protect human health and safety, the environment, and physical property. At the prehearing conference, the ALJ granted Applicant's motion for summary disposition on Issues 2-4; however, in post-hearing briefing, Protestants urged reconsideration as to Issue 4, and those arguments are addressed below.

At the hearing on the merits, 11 exhibits were admitted for Protestants. The ED and Applicant presented additional evidence in response to evidence offered by Protestants. Nine exhibits were admitted for Applicant and 22 for the ED.

[18] *See* SOAH Order No. 2 (Oct. 20, 2023).

A. ISSUE 1: WHETHER THE DRAFT PERMIT IS ADEQUATELY PROTECTIVE OF WATER QUALITY INCLUDING THE PROTECTION OF SURFACE WATER IN SOUTH PRONG CREEK AND LAKE WAXAHACHIE, IN ACCORDANCE WITH APPLICABLE REGULATIONS INCLUDING THE TEXAS SURFACE WATER QUALITY STANDARDS

Protestants argue that the Draft Permit sets inadequate effluent limits because the ED's modeling (1) relied on faulty inputs for water body geometry; (2) failed to account for an on-channel impoundment on the unnamed tributary; (3) assumed an incorrect baseline level of DO; (4) neglected to adequately address phosphorus loading; and (5) failed to meet Tier 2 antidegradation requirements. Each of Protestants' contentions is addressed below, followed by a discussion of Applicant's, the ED's, and OPIC's evidence and/or arguments, and the ALJ's analysis.

1. Stream geometry in the ED's modeling

The ED used the QUAL-TX model to evaluate DO in the unnamed tributary and downstream into South Prong Creek, and a Continuously Stirred Tank Reaction (CSTR) model to assess DO impacts in the SCS 17 Reservoir.[19] QUAL-TX is used to determine effluent limits for discharges into nontidal freshwater streams, and CSTR is typically used for discharges to small impoundments like the SCS 17 Reservoir.[20] As previously noted, the uses for the unclassified portions of the receiving water are intermittent, minimal aquatic life use for the unnamed tributary (Reach 1); intermittent with perennial pools, limited aquatic life use for

[19] ED Ex. JR-1 at 336-37.

[20] App. Ex. 8 at 459.

South Prong Creek (Reach 2); and perennial, high aquatic life use for the SCS 17 Reservoir (the backwater of which was designated Reach 5).[21] Based on these uses, minimum DO criteria are 2.0 mg/L (Reach 1), 3.0 mg/L (Reach 2), and 5.0 mg/L (Reach 5).[22] The ED's models predicted minimum DO values as follows:

DO Criteria and ED's Predicted Minimum DO[23]				
	Minimum DO criteria	**Interim I predicted**	**Interim II predicted**	**Final predicted**
Reach 1	2.0 mg/L	4.16 mg/L	4.06 mg/L	5.42 mg/L
Reach 2	3.0 mg/L	5.08 mg/L	4.70 mg/L	5.01 mg/L
Reach 5	5.0 mg/L	5.96 mg/L	4.96 mg/L	4.81 mg/L

While the predicted values for Reach 5 in the Interim II and Final phases are below 5.0 mg/L, all parties agreed that a 0.20 mg/L allowance applies and the predicted values of 4.96 and 4.81 mg/L are acceptable.[24] However, Protestants argued the ED's inputs were inaccurate and skewed the DO predictions.

a) Protestants' evidence and arguments

Protestants' expert witness Tim Osting, P.E. is a water resources engineer.[25] He testified the ED's models "generally calculate outputs correctly given the model

[21] ED Ex. JL-1 at 12-13.

[22] 30 Tex. Admin. Code § 307.7(b)(3)(A)(i).

[23] ED Ex. JR-1 at 339-40; ED Ex. JR-4 at 355-56.

[24] *See* ED Ex. JR-1 at 339; Prot. Ex. 1 at 16-17.

[25] Mr. Osting's résumé is contained in Protestants Exhibit 2.

inputs," but opined that the ED's stream geometry inputs were too wide for Reach 1 and too deep for Reach 2, resulting in higher predicted DO in Reach 5.[26]

Mr. Osting visited the proposed Facility site on October 13, 2023, and took water samples and photographs. Based on his observations, Mr. Osting stated the stream width of Reach 1 is about 10 feet, instead of 28 feet as modeled by the ED.[27] Protestants contend the incorrect stream width falsely inflates the DO predictions because a wider width adds more DO through aeration.[28] For Reach 2, Mr. Osting said the modeled stream was too deep, with "predicted velocity too slow for the slope as measured from the topographic map (slope = 0.0036 ft/ft)."[29] The greater modeled depth for Reach 2 allows more time for CBOD and NH_3-N to decay than would occur with the correct, likely shallower depth and faster velocity.

According to Protestants, the inaccurate inputs for Reach 1 and Reach 2 have a "trickledown effect through the rest of the [ED's] modeling" that causes the predicted DO in subsequent reaches to be inaccurately high.[30] If the QUAL-TX model is re-run with corrected Reach 1 and Reach 2 inputs based on Mr. Osting's measurements, the DO concentration in Reach 5 in the Final phase would be 4.34 mg/L (not 4.81 mg/L as calculated by the ED), falling short of the 5.0 mg/L

[26] Prot. Ex. 1 at 14-15.

[27] Prot. Ex. 1 at 15.

[28] Prot. Closing Brief at 6.

[29] Prot. Ex. 1 at 15.

[30] Prot. Closing Brief at 4-5.

requirement even with a 0.20 mg/L allowance.[31] Mr. Osting stated that if he re-ran the QUAL-TX model with (a) revised inputs to match his stream measurements and also included (b) a stronger permit limit on NH_3-N of 0.5 mg/L instead of 1.0 mg/L, the output would be 4.81 mg/L DO for Reach 5, which would be satisfactory.[32]

b) ED's evidence and arguments

The ED's expert witness Josi Robertson is a DO modeler on the Water Quality Assessment Team.[33] She testified that the "'geometry' coefficients that were altered in Mr. Osting's model are actually the stream hydraulics coefficients," and his revisions were improper because reach-specific inputs "require data collected from the stream ***when flow is present***."[34] She elaborated that the hydraulic calculations are based on "the interrelationship of not just stream width and depths but velocity and flow volume as well"—measurements that cannot simply be taken from non-flowing or dry streambeds or from satellite imagery alone.[35] In the absence of sufficient reach-specific data, Ms. Robertson said the QUAL-TX standard operating procedures (SOPs) call for standardized default hydraulic coefficients that are "based on a large sampling of Texas streams and have been approved by both TCEQ and the EPA as being representative for most Texas streams[.]"[36]

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[31] Prot. Ex. 1 at 19.

[32] Prot. Ex. 1 at 19-20.

[33] Ms. Robertson's résumé is contained in ED Exhibit JR-2.

[34] ED Ex. JR-1 at 340 (emphasis in original).

[35] ED Ex. JR-1 at 340.

[36] Transcript of Hearing on the Merits (Tr.) at 113.

For Reach 1, Ms. Robertson determined default coefficients should be used. For Reach 2, Applicant had collected data such as flow volume and velocity when flow was present in South Prong Creek, so she was able to calculate specific hydraulic coefficients.[37] Ms. Robertson said these inputs for Reach 2 were consistent with the QUAL-TX SOPs and the IPs and were more reliable than Mr. Osting's "single data point" because Applicant's data was collected under flow conditions.[38]

c) Applicant's evidence and arguments

Applicant's expert witness Paul Price, a biologist,[39] accompanied Mr. Osting on the latter's October 13, 2023 site visit. In general, Mr. Price said, Reach 1 has a "trapezoidal channel with sloping sides" that results in a significantly larger top width when the stream is flowing, as compared to dry streambed widths.[40]

Mr. Price commented that "very accurate modeling" of a stream reach requires measuring depth at multiple locations, and velocity at multiple locations and depths, to establish the numerical relationships among flow volume, stream velocity, width, and average depth.[41] This process is "extremely labor intensive and is generally done only in special circumstances, such as establishment or maintenance of stream gage locations or in site specific Aquatic Life Use assessments."[42]

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[37] ED Ex. JR-1 at 341.

[38] ED Ex. JR-1 at 344.

[39] Mr. Price's résumé is contained in Applicant Exhibit 3.

[40] App. Ex. 2 at 383.

[41] App. Ex. 2 at 382.

[42] App. Ex. 2 at 382.

However, this exercise is not generally needed because there are similarities across broad areas of Texas (in climate, soils, topography, and geology) that result in similar channel morphologies.[43] Therefore, the ED's use of default coefficients for Reach 1 was justified and sufficiently accurate for QUAL-TX DO modeling.[44] For Reach 2, actual channel characteristics under flow conditions were reported in the Application and were properly used by the ED as inputs, in Mr. Price's opinion.[45]

Applicant's expert James Machin, P.E.[46] said that—based on the similarity in the streambed bottom widths in Reach 1 measured by Applicant (10.94 feet on average) and Mr. Osting's stated measurement for the stream *top* width (10 feet)—it appeared Mr. Osting was actually using a streambed *bottom* measurement.[47] Given the trapezoidal channel shape of Reach 1, Mr. Machin said the side slope was "probably 5:1," meaning the top width "increases significantly" by about 5 feet in width for each additional foot in depth.[48] Using Applicant's average measured bottom width of 10.94 feet and the ED's calculated depth of 1.09 feet, the average top width of Reach 1 would be 22 feet, which is "close to the ED's modeled top width of 28 ft."[49] Mr. Machin opined "the ED's geometry is quite reasonable."[50]

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[43] App. Ex. 2 at 382-83.

[44] App. Ex. 2 at 382.

[45] App. Ex. 2 at 383.

[46] Mr. Machin's résumé is contained in App. Ex. 9.

[47] App. Ex. 8 at 463; *see also* Tr. at 56.

[48] App. Ex. 8 at 463.

[49] App. Ex. 8 at 463-64.

[50] App. Ex. 8 at 466.

Addressing whether the ED's modeled depth in Reach 2 was too deep with predicted velocity too slow for the slope, Mr. Machin took issue with Mr. Osting's map-based slope estimate. Applicant measured the slope of Reach 2 from the confluence with Reach 1 to the inundated headwaters of Reach 3 during flow conditions at 0.0025 ft/ft with a drop of 10 feet over 0.75 miles, whereas Mr. Osting derived a slope of 0.0036 ft/ft based on a topographic map.[51] Applicant's measurements resulted in modeled depth for Reach 2 at full flow (Final phase) of 5 inches with a velocity of 0.27 ft/s, which Mr. Machin termed "very reasonable" for "a stream of this size and slope[.]"[52]

d) OPIC's arguments[53]

OPIC found the ED correctly used site-specific geometry where available, such as for Reach 2. Therefore, OPIC agreed "with Applicant and the ED's analysis…that the QUAL-TX and CSTR models performed by the ED sufficiently demonstrate that the TSWQS will be met[.]"[54]

e) ALJ's analysis

Mr. Price testified persuasively that developing a stream-specific reach model requires an "extremely labor intensive" process that is unnecessary except in "special circumstances" that do not apply here. In the absence of reliable and robust

[51] App. Ex. 8 at 464; *see also* ED Ex. JR-1 at 341.

[52] App. Ex. 8 at 464.

[53] OPIC did not submit direct evidence in this case. Although OPIC submitted a closing brief, it did not submit a response to other parties' closing briefs.

[54] OPIC Closing Brief at 8.

site-specific data, it is reasonable to use default inputs that, as Ms. Robertson stated, have been shown to be representative for Texas streams and have been approved by TCEQ and the EPA. The "site-specific" width Protestants urge should be used for Reach 1 (10 feet) is of questionable accuracy, given it is more in line with Applicant's streambed measurements for that reach (an average of 10.94 feet) than the top stream width of a trapezoidal channel. Further, as Ms. Robertson noted, reach-specific hydraulic coefficients require data collected when flow is present, a circumstance that did not exist during Mr. Osting's site visit.

For Reach 2, Mr. Osting said the slope measured from the topographic map should result in a faster velocity than what the ED's QUAL-TX outputs indicated. However, there were actual site-specific values available for Reach 2 that were taken during flow conditions, obviating the need for topographic map-based inputs—and the modeled depth and velocity were "very reasonable" in Mr. Machin's expert opinion. While Protestants argued that incorrect stream geometry inputs skewed the DO modeling used to set the Draft Permit's effluent limits, the evidence indicates Applicant used reasonable and proper inputs for both Reach 1 and Reach 2.

2. On-channel impoundment

a) Protestants' evidence and arguments

During his site visit, Mr. Osting photographed what he termed an on-channel impoundment on the unnamed tributary, at Location 215. He stated that even given low-flow conditions, "this impoundment was holding water and slowly releasing it immediately downstream to Location 214 when observed stream locations in

Reach 1 upstream (Location 216, 217, 218 in Reach 1) and downstream (Location 220) were dry."[55] The impoundment, Mr. Osting said, will "at times experience lower dissolved oxygen content after the [proposed] discharge compared to the adjacent stream."[56] During the hearing, Mr. Osting conceded there was a 2.25-inch rainfall on October 4-5, 2023, a week prior to his site visit, and about 4.5 inches of rain in the previous month.[57]

b) ED's, Applicant's, and OPIC's evidence and arguments

Applicant and the ED rejected the characterization of the water at Location 215 as an "impoundment." Ms. Robertson testified the pool is visible from Google Earth Imagery on only one date, March 21, 2018, which is not enough evidence to validate the location as a perennial pool or a water body that "would likely be sustained for any significant length of time" under the hot, dry summer conditions assumed in the QUAL-TX model.[58] Given the rainfall event shortly before Mr. Osting's site visit, Ms. Robertson said it was "entirely reasonable" the pool at Location 215 was a result of the rain rather than a persistent feature.[59]

Mr. Machin concurred, stating that an impoundment is "a body of water confined within an enclosure, such as a reservoir," whereas Location 215 reflected

[55] Prot. Ex. 1 at 14.

[56] Prot. Ex. 1 at 14-15.

[57] Tr. at 20; App. Ex. 12.

[58] ED Ex. JR-1 at 341.

[59] Tr. at 92.

"a temporary pool caused by the recent rainstorms" in the area.[60] He added that multiple site visits by Applicant's representatives confirmed the unnamed tributary was intermittent without any perennial pools.[61] Mr. Price testified that he, too, photographed the pool during the October 13, 2023 site visit. He looked up rainfall reports from the National Weather Service and online sources and confirmed that there had been at least two inches of rain recorded at the Waxahachie airport a week before the site visit.[62] The result was that "there was a lot of water coming down that day [October 4-5, 2023] in the general watershed of Lake Waxahachie" that "probably" accounted for the temporary pool a week later.[63] Moreover, when discharge commences from the Facility, the pool, if present, "will no longer be isolated and stagnant" but will "experience an oxygen regime similar to the stream reaches above and below it."[64]

After reviewing the evidence "indicating recent rains, in addition to testimony from multiple experts and witnesses demonstrating that the unnamed tributary is more than likely intermittent without perennial pools," OPIC agreed that an "on-channel impoundment" should not be included when modeling Reach 1.[65]

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[60] App. Ex. 8 at 467.

[61] App. Ex. 8 at 467.

[62] Tr. at 38-39.

[63] Tr. at 39.

[64] App. Ex. 2 at 384.

[65] OPIC Closing Brief at 10.

c) ALJ's analysis

The preponderant evidence supports the position taken by Applicant, the ED, and OPIC with respect to the pool found at Location 215. It is likely the documented heavy rainfall a week prior to Mr. Osting's site visit accounted for the presence of water at that location. There is no credible evidence the pool is persistent; Ms. Robertson's review of Google Earth data confirms the pool is visible in imagery only on one other date, over five years prior to the site visit. Furthermore, as Mr. Price noted, discharge flow under permit conditions will prevent the pool—if present at that time—from being stagnant. The ALJ finds that the ED's modeling properly does not include an on-channel impoundment in Reach 1.

3. Baseline DO saturation[66]

a) Protestants' evidence and arguments

Mr. Osting measured DO of 0.78 mg/L in the pool at Location 215, 3.01 mg/L downstream, and 3.67 mg/L in Reach 3 during his site visit.[67] The resulting DO saturation would be below 45% per Mr. Osting's calculations, which he noted is "a worse condition than the default assumed 80% background baseline condition" in the ED's models.[68] He added that the models do not "consider the daily cycles of changes to dissolved oxygen that result from changes in temperature and changes in

[66] OPIC did not address Protestants' arguments concerning the significance, if any, of Mr. Osting's DO measurements for the baseline DO saturation used in the ED's models. *See* OPIC Closing Brief at 4 (noting that OPIC focused on a select number of the "host of sub-issues" on which Protestants offered testimony).

[67] Prot. Ex. 1 at 17-18; Prot. Ex. 6.

[68] Prot. Ex. 1 at 18.

oxygen production by algae photosynthesis in [the SCS 17 Reservoir]."[69] Protestants say the use of an 80% background saturation assumption causes DO predictions to be higher than would actually occur if Mr. Osting's DO measurements are applied.

b) ED's evidence and arguments

Ms. Robertson stated that when site-specific values for background DO saturation are used in the ED's models, they typically come from surface water quality monitoring (SWQM) stations and "go back decades," constituting a "robust data set."[70] There are no SWQM stations along the unnamed tributary, South Prong Creek, or the SCS 17 Reservoir, and "therefore the default assumption of 80% saturation was used."[71] Ms. Robertson opined that the "single sampling event" Mr. Osting conducted "is in no way sufficient to develop an alternative site-specific daily average dissolved oxygen saturation value."[72]

Further, Ms. Robertson rejected Mr. Osting's criticism that the ED's models do not consider the "daily cycle of changes" in DO. She explained that, as directed by the IPs, the "24-hour mean dissolved oxygen is the principal criterion of concern" in modeling DO impacts under "the most pessimistic of discharge conditions."[73] Predicting DO variations over the course of any period of time is not the objective.[74]

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[69] Prot. Ex. 1 at 20.

[70] Tr. at 95.

[71] ED Ex. JR-1 at 342.

[72] ED Ex. JR-1 at 342-43.

[73] Tr. at 94 (discussing ED Ex. JL-3 at 109).

[74] ED Ex. JR-1 at 344; Tr. at 93-94.

Similarly, she noted that, per the IPs, the effects on DO "due to the presence of aquatic plants are usually not considered."[75] For algae photosynthesis to be incorporated, sufficient chlorophyll-a sampling must be available. In the absence of reliable data, Ms. Robertson said it is more conservative not to count any oxygen that might be present due to aquatic plant activity.[76]

c) Applicant's evidence and arguments

Mr. Price questioned some of Mr. Osting's measurements. He said a low DO in the pool at Location 215 was unsurprising, given that it was small, isolated, and filled with woody debris.[77] The DO Mr. Osting measured in the SCS 17 Reservoir, however, was "unexpectedly low for an afternoon measurement in a ponded environment exposed to full sunlight."[78] This value could be due to the large load of debris and sediment washed in by the heavy rain a week earlier, high turbidity and soft sediment, and/or a malfunctioning or improperly calibrated multiprobe.[79]

Mr. Price said the SWQM station in Lake Waxahachie reflects a 50-year average of 227 microsiemens per centimeter (µS/cm) for specific conductance, but Mr. Osting measured 55 µS/cm in the nearby SCS 17 Reservoir, suggesting his multiprobe may not have been working properly.[80] Whatever the reason for the low

[75] ED Ex. JL-3 at 109.

[76] Tr. at 94-95.

[77] App. Ex. 2 at 384.

[78] App. Ex. 2 at 379.

[79] App. Ex. 2 at 379.

[80] App. Ex. 2 at 380; Tr. at 26.

DO measurements, Mr. Price reiterated that "the results are questionable" and should not alter the ED's modeling.[81] He added that QUAL-TX and CSTR already "incorporat[e] daily variations" by including them in the 24-hour DO average.[82]

Mr. Machin agreed that QUAL-TX and CSTR use the 24-hour mean DO, not a single DO value or the lowest DO in a given period. Effects of aquatic plant activity are also excluded in general because modeling those inputs would "require extensive data and model calibration and verification," far beyond Mr. Osting's sampling.[83]

d) ALJ's analysis

Based on three DO measurements taken on a single day, Protestants argue the ED's models should not have used a default 80% DO background saturation. The ALJ agrees with the ED and Applicant that Mr. Osting's measurements appear unreliable, notably when using specific conductance values as a point of comparison. Assuming it is valid, a low DO in the pool at Location 215 is unsurprising, because it was a stagnant pond with a recent influx of oxygen-demanding woody debris. Moreover, that value is of limited significance given that, under flow conditions, such a pool (if present at all) will not be stagnant.

As for the other two DO measurements Mr. Osting took, they are snapshots at a given moment, not the 24-hour average DO measurements that the IPs

[81] App. Ex. 2 at 380.

[82] App. Ex. 2 at 385.

[83] App. Ex. 8 at 468.

prioritize. Mr. Osting's concern about temperature impacts on DO is misplaced given that the ED's models already assume the worst-case scenario with respect to temperature. And rather than giving credit for any oxygen that might be added by algae photosynthesis, the models are made more conservative by omitting that factor in the absence of reliable chlorophyll-a sampling data. The ALJ finds the ED properly used a default DO saturation of 80% to model expected 24-hour average DO levels.

4. Phosphorus loading

a) Protestants' evidence and arguments

Mr. Osting said the water samples he took during the site visit reflected a total phosphorus concentration of 0.0756 mg/L in Reach 3.[84] He testified that the ED's "model and the model evaluation omit consideration of loading of phosphorus from proposed wastewater discharges" and cautioned that the Facility's discharge will "further increase the phosphorus concentration in the watershed."[85]

As mentioned above in the discussion of stream geometry, Mr. Osting argued the ED's models needed to be re-run with revised coefficients and a more stringent limit of 0.5 mg/L for NH_3-N if the discharge is to meet the minimum level of 5.0 mg/L DO in the SCS 17 Reservoir.[86] Protestants claim Applicant "provided no rebuttal evidence to show that Mr. Osting's observations, or his measurements of

[84] Prot. Ex. 1 at 21; Prot. Ex. 9 at 209.

[85] Prot. Ex. 1 at 20.

[86] Prot. Ex. 1 at 16. As mentioned above, Mr. Osting said that his revised calculation results in a predicted DO of 4.81 mg/L, which is within the 0.20 mg/L allowance for a 5.0 mg/L DO criterion.

dissolved oxygen, phosphorus, and other constituents, were not true and sufficient evidence" that the Draft Permit limits will be inadequately protective.[87]

b) ED's evidence and arguments

TCEQ's general narrative criteria are that nutrients from a discharge must not cause excessive growth of aquatic vegetation that impairs uses of the waterbody.[88] The ED's expert Jenna Lueg,[89] an aquatic scientist on the Standards Implementation Team, testified that she considered the required range of factors for the nutrient screening, including proposed discharge flow rates, instream dilution, substrate type, depth, stream type, shading, impoundments, water clarity, sensitivity to growth of aquatic vegetation, existing water quality concerns and impairments, and consistency with other permits in the area.[90] She pointed out there is no numeric standard for phosphorus in the TSWQS for any water body in the proposed discharge route.[91] Accordingly, she performed a total phosphorus screen for South Prong Creek and the SCS 17 Reservoir.

Ms. Lueg observed that in South Prong Creek, "the discharge is high [and] the water is fairly clear…[which] warrants that a TP limit may be possible."[92] For the SCS 17 Reservoir, "the discharge is less than 2 miles with a high discharge flow,

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[87] Prot. Closing Brief at 3-4, 8-9.

[88] 30 Tex. Admin. Code § 307.4(e).

[89] Ms. Lueg's résumé is contained in ED Exhibit JL-2.

[90] ED Ex. JL-1 at 17.

[91] Tr. at 76-77.

[92] ED Ex. JL-5 at 312-13.

there is not much canopy cover…[and] local effects and main pool of the reservoir scored high indicating a limit is needed."[93] To safeguard against excessive growth of aquatic vegetation, Ms. Lueg determined the Draft Permit should include a TP limit of 1.0 mg/L for the Interim I and II phases and 0.5 mg/L for the Final phase.[94] The ED rejects Protestants' claims regarding phosphorus loading as unsupported by the evidence and reiterates that site-specific data such as Mr. Osting's phosphorus measurement are incorporated into modeling only if the data set is robust.[95]

c) Applicant's evidence and arguments[96]

Applicant notes that the SWQM station for Lake Waxahachie has nearly 50 years of TP data for Lake Waxahachie showing phosphorus levels "much lower than 0.0756 mg/L" and, for the last 10 years of the study, as low as an average of 0.04 mg/L.[97] There is no current impairment or problem in Lake Waxahachie due to TP or algae, and therefore, Applicant contends, no reason to change the ED's recommended TP limits in the Draft Permit.[98]

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[93] ED Ex. JL-5 at 313.

[94] ED Ex. JL-1 at 17.

[95] ED Reply Brief at 4.

[96] Prior to offering Mr. Osting's pre-filed testimony into evidence at the hearing, Protestants struck some portions relating to the impacts of phosphorus loading. *See* Tr. at 13-14. The record copy of Mr. Osting's testimony shows the redlined deleted testimony. Prot. Ex. 1 at 20-21. The ALJ notes that the pre-filed testimonies of Applicant's experts were not similarly edited to remove their responses to the statements that are no longer in Mr. Osting's testimony. *See*, *e.g.*, App. Ex. 8 at 468. However, since Protestants' underlying claims are no longer being offered to rebut the Prima Facie Demonstration, the ALJ does not discuss the responsive portions of other witnesses' testimonies.

[97] App. Reply Brief at 10 (citing App. Ex. 7, Excel version, TP sheet, column P, row 45).

[98] App. Reply Brief at 10.

Mr. Machin said modeling for nutrients such as phosphorus is complex because phosphorus "undergoes various chemical, physical, and biological changes and interactions that are difficult to predict."[99] This difficulty is why the ED "never runs [a] model for TP or other nutrients."[100] Instead of trying to predict phosphorus numbers, the nutrient screening considers whether a phosphorus limit is prudent. The ED's witness Ms. Lueg conducted this screening, and Mr. Machin opined the Draft Permit limits on TP were appropriate.

In addition to the complexities of predicting phosphorus changes, Applicant's witnesses questioned the validity of the 0.0756 mg/L TP result from Mr. Osting's sample. Mr. Price noted that after the October 13, 2023 site visit, Mr. Osting "stated that it was unlikely he would be able to deliver [the water samples] to the LCRA lab for analysis within the prescribed holding times."[101] Hold times are established by the EPA to ensure that a sample is analyzed prior to changes that "can affect the integrity of the sample."[102] Indeed, Mr. Price testified, the lab report states that the "biologically active parameters…([including] ortho-phosphate) were analyzed past their holding times."[103] Mr. Machin agreed that several of Mr. Osting's samples exceeded hold times and the results were invalid. Mr. Price added that "[t]ypical domestic wastewater contains TP concentrations much higher than 0.5 mg/L,"

[99] App. Ex. 8 at 464.

[100] App. Ex. 8 at 464-65.

[101] App. Ex. 2 at 379.

[102] App. Ex. 8 at 465-66.

[103] App. Ex. 2 at 379; *see also* Prot. Ex. 9 at 208.

which is the limit set in the Final phase.[104] Per Mr. Machin, many TCEQ-issued domestic wastewater permits do not have any TP limits.[105]

d) OPIC's arguments

OPIC agreed with the ED and Applicant that a numerical model to predict phosphorus numbers is problematic, supporting the ED's approach of using a nutrient screening to establish a phosphorus limit. After reviewing the evidence, OPIC stated it is "satisfied that the draft permit is sufficiently protective of water quality with respect to phosphorus."[106]

e) ALJ's analysis

Protestants proffered a single phosphorus value from a sample that appears to have been analyzed past its hold time, meaning the sample's integrity and the validity of the analysis are in doubt. Further, even assuming the sample value of 0.0756 mg/L is accurate, Protestants did not identify an applicable requirement for phosphorus that would be violated by this value. Nor is it apparent that this value is a harbinger of deleterious changes in water composition or quality. The preponderant evidence supports the Draft Permit's 0.5 mg/L limit on TP in the Final phase, which is less than typically found in domestic wastewater discharges.

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[104] App. Ex. 2 at 381.

[105] App. Ex. 8 at 469.

[106] OPIC Closing Brief at 12.

5. Tier 2 antidegradation review

a) Protestants' evidence and arguments

Mr. Osting rejected the ED's preliminary determination that a Tier 2 antidegradation review showed the "SCS 17 Reservoir would not experience significant degradation."[107] He testified that "changes resulting from the proposed discharge may constitute a lowering of water quality that exceeds the Tier 2 criteria."[108] Based on Mr. Osting's observations during the site visit, Protestants object that the "Application and Draft Permit do not properly take realities of the receiving water bodies into consideration and therefore the Draft Permit is not stringent enough to protect the existing water quality" as required.[109]

b) ED's evidence and arguments

The ED's expert Ms. Lueg stated she identified the presumptive uses for unclassified receiving water bodies, checked for concerns related to endangered or threatened aquatic or aquatic-dependent species, and performed the nutrient screen discussed above.[110] She noted a Tier 1 antidegradation review is required for water bodies with limited or minimal aquatic life use, like the unnamed tributary and South Prong Creek. After performing that technical review, she determined that—

[107] Prot. Ex. 1 at 18.

[108] Prot. Ex. 1 at 18.

[109] Prot. Reply Brief at 4.

[110] ED Ex. JL-1 at 10-11, 14-15, 17-18.

if Applicant operates the Facility in accordance with the terms of the Draft Permit—the discharge will not impact existing uses of those water bodies.[111]

Ms. Lueg said a Tier 2 antidegradation review was necessary for the SCS 17 Reservoir, which has high aquatic life use.[112] As required for a Tier 2 review, Ms. Lueg considered parameters including DO, pH, temperature, toxic pollutants, bacteria, nutrients, taste and odor, suspended solids, turbidity, foam and froth, and oil and grease.[113] Based on the nutrient screening, Ms. Lueg determined a TP limit of 1.0 mg/L for the Interim I and II phases and 0.5 mg/L for the Final phase would ensure that the "[e]xisting uses will be maintained and protected" and "no significant degradation of water quality is expected in the SCS 17 Reservoir."[114]

c) Applicant's evidence and arguments

Mr. Machin stated that the phosphorus limit in the Draft Permit is "very stringent."[115] He reiterated that the phosphorus value obtained by Mr. Osting was from a sample analyzed past its hold time. Applicant notes that even if taken at face value, Mr. Osting's single TP reading of 0.0756 mg/L is "still far less than the 0.69 mg/L TP concern level noted in [the] 2020 Texas Integrated Report for the Trinity River Watershed."[116] It does not rise to the level of a concern for a Tier 2

[111] ED Ex. JL-1 at 18-19.

[112] ED Ex. JL-1 at 18.

[113] ED Ex. JL-1 at 16.

[114] ED Ex. JL-1 at 18.

[115] App. Ex. 8 at 468.

[116] App. Reply Brief at 11 (citing Prot. Ex. 4).

antidegradation review because no "significant" degradation of water quality can reasonably be predicted. Consequently, Applicant dismisses Mr. Osting's testimony that "there 'may' be a lowering of water quality exceeding Tier 2 antidegradation criteria" as "completely speculative."[117]

d) OPIC's arguments

OPIC states that, "[a]fter examining all arguments, OPIC finds that the greater weight of the evidence supports Applicant's assertion that the draft permit's proposed permit limits are in accordance with pertinent statutory mandates…and are sufficiently protective of water quality and uses of water in the state."[118]

e) ALJ's analysis

Protestants' arguments hinge on Mr. Osting's testimony that "changes resulting from the proposed discharge *may* constitute a lowering of water quality that exceeds the Tier 2 criteria."[119] The supporting evidence is a single phosphorus reading that, as discussed above, is of doubtful validity and was not shown to violate any applicable standard or requirement. This evidence does not meet Protestants' burden of production to show that "one or more provisions in the draft permit violate a specifically applicable state or federal requirement" as directed by Texas Government Code section 2003.047(i-2). Ms. Lueg testified that she performed a nutrient screen and completed the Tier 1 and Tier 2 antidegradation reviews in

[117] App. Closing Brief at 10.

[118] OPIC Closing Brief at 12.

[119] Prot. Ex. 1 at 21 (emphasis added).

accordance with the IPs, and Applicant's experts concurred with her analysis. Applicant met its burden to show water quality and uses will be maintained.

B. ISSUE 2: WHETHER THE DRAFT PERMIT SHOULD BE ALTERED OR DENIED BASED ON APPLICANT'S EXPERIENCE AS A FACILITY AND SYSTEM OPERATOR[120]

No party presented evidence rebutting the Prima Facie Demonstration as to Applicant's experience as a facility and system operator.

C. ISSUE 3: WHETHER THE APPLICATION IS SUBSTANTIVELY COMPLETE[121]

No party presented evidence rebutting the Prima Facie Demonstration that the Application is substantively complete.

D. ISSUE 4: WHETHER THE APPLICATION WAS PROPERLY NOTICED

At the prehearing conference, the ALJ granted Applicant's motion for summary disposition on Issue 4, noting that no party had presented evidence to challenge whether the Application was properly noticed. In their Closing Brief, Protestants argue that the "notice of the application in question is deficient on its face" and the summary disposition ruling should be reconsidered.[122]

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[120] As stated above, the ALJ granted Applicant's motion for summary disposition on Issue 2.

[121] As stated above, the ALJ granted Applicant's motion for summary disposition on Issue 3.

[122] Prot. Closing Brief at 2-3.

The following facts regarding issuance of notice were undisputed and provide context for the parties' arguments:

- On August 18, 2021, the TCEQ issued a Notice of Receipt of Application and Intent to Obtain Water Quality Permit (NORI),[123] which Applicant properly published.[124]
- On September 30, 2022, the TCEQ issued a revised NORI (NORI2) combined with a Notice of Application and Preliminary Decision for Municipal Wastewater New Permit No. WQ0015999001 (NAPD).[125]
  - The NORI2 was issued to "revise the facility location stated in the NORI to approximately 2.7 miles southwest of the intersection of East Farm-to-Market Road 875 and Farm-to-Market Road 663" and to revise the outfall location to "discharge to the receiving waterbody of an unnamed tributary instead of directly to South Prong Creek."[126]
  - Applicant properly published the NORI2/NAPD.[127]

1. Protestants' arguments

According to Protestants, TCEQ's rules contemplate "two separate notices provided regarding [an] application, with one notice being issued immediately after the application is declared administratively complete, and the second notice

[123] App. Ex. 1 at 128-30.

[124] The NORI was published in Spanish on August 26, 2021, in the *Tex Mex News*, and in English on September 1, 2021, in the *Waxahachie Sun*. App. Ex. 1 at 80, 85.

[125] App. Ex. 1 at 63-65.

[126] App. Ex. 1 at 63.

[127] The combined NORI2/NAPD was published in English on October 5, 2022, in the *Waxahachie Sun*, and in Spanish on October 6, 2022, in the *Tex Mex News*. App. Ex. 1 at 55, 58.

provided after the draft permit has been prepared."[128] Each notice would provide the public and affected persons with opportunities to comment, but the ED issued a combined notice that "effectively eliminated the public's/affected persons' ability to comment on the application *before* the draft permit is prepared."[129]

Protestants state that TCEQ "lacked authority to issue a NORI with substantive changes on the same day as the NAPD."[130] As support, Protestants cite 30 Texas Administrative Code sections 39.418, .419, and .551, and comment that section 39.551 was adopted pursuant to House Bill 801, the purpose of which was to "encourage early public participation in the environmental permitting process[.]"[131]

2. The ED's and Applicant's arguments[132]

The ED states it is "common practice for TCEQ to issue a combined NORI/NAPD when a NORI is amended after its initial publication" and notes that Protestants did not cite any statutory authority requiring a NORI and NAPD to be issued or published separately; or forbidding a NORI and NAPD from being combined; or requiring an opportunity for the public to comment on an application before preparation of a draft permit.[133] Further, the ED observes that no person or

[128] Prot. Closing Brief at 3.

[129] Prot. Closing Brief at 3 (emphasis in original).

[130] Prot. Closing Brief at 3.

[131] Prot. Closing Brief at 3 (citing 24 Tex. Reg. 8190 (Sept. 24, 1999)).

[132] OPIC did not file a response to any other party's closing brief, so it did not take a position on this argument, first raised in Protestants' Closing Brief.

[133] ED Reply Brief at 2.

entity was precluded from commenting on the NORI from its issuance and publication in August-September 2021 through the close of the comment period on November 7, 2022.[134] Finally, the ED points out that a "draft permit is just as it says, a *draft*[,]" and the "existence of such a draft does not prevent the public from commenting on the application."[135]

Applicant generally echoes the ED's arguments.[136] Both the ED and Applicant reference 30 Texas Administrative Code section 39.405(d), which states that notice "may be combined to satisfy more than one applicable section" of chapter 39.[137] And, without conceding any deficiency in notice, Applicant further highlights that there is no evidence a third party entitled to notice did not receive it. Protestants, for their part, "participated fully in this case."[138]

3. ALJ's analysis

Protestants' first reference to deficient notice was in their closing brief, which in itself raises a notice-like problem. The burden-shifting implemented by Texas Government Code section 2003.047(i-1)-(i-3) allows a party to rebut a prima facie demonstration by "presenting evidence" that demonstrates one or more provisions

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[134] ED Reply Brief at 2. The ED's Reply Brief states that the public had "over a year to review the combined NORI/NAPD," which appears to be a typographical error since the combined NORI2/NAPD was published on September 30, 202**2**, not that date in 202**1** as stated in the Reply Brief. However, the ED is correct that the comment period did not close until November 7, 2022, over a year after the initial publication of the NORI.

[135] ED Reply Brief at 2 (emphasis in original).

[136] App. Reply Brief at 5-6.

[137] ED Reply Brief at 1-2; App. Reply Brief at 4-5.

[138] App. Reply Brief at 5.

in the draft permit "violate a specifically applicable state or federal requirement."[139] By failing to present evidence at the prescribed time, Protestants deprived Applicant and the ED of the opportunity to present "additional evidence" in support of the Draft Permit, as allowed by Texas Government Code section 2003.047(i-3).

Further, the ALJ agrees with the ED and Applicant that applicable rules are permissive toward combined notice(s). Titled "General Notice Provisions," the rule at 30 Texas Administrative Code section 39.405(d) plainly states, "Notice may be combined to satisfy more than one applicable section of this chapter." The rule relating to publication of an NAPD indicates that NAPD must be published "at least once in the same newspaper" as the NORI,[140] but the ALJ can identify no prohibition against the ED's issuance and Applicant's publication of a combined NORI/NAPD. There also is no showing that any party was harmed by the notice provided. The ALJ reaffirms the grant of summary disposition to Applicant on Issue 4.

E. ISSUE 5: WHETHER A PERMIT, IF ISSUED CONSISTENT WITH THE DRAFT PERMIT, WOULD PROTECT HUMAN HEALTH AND SAFETY, THE ENVIRONMENT, AND PHYSICAL PROPERTY, RELATING TO THE DISCHARGE OF EMERGING CONTAMINANTS IN THE EFFLUENT

Contaminants of emerging concern (CECs) are "a diverse set of materials, including prescription drugs, hormones originating in human and animal wastes, and a wide variety of commercial and industrial chemicals presently circulating in the

[139] Tex. Gov't Code § 2003.047(i-2).

[140] 30 Tex. Admin. Code § 39.419(b).

environment."[141] Although the EPA is studying CECs and their presence in public water supplies, the parties agree that no federal or state regulatory schemes currently address CECs.[142]

1. Protestants' Evidence and Arguments

Mr. Osting said CECs such as "pharmaceuticals are effective in humans at low concentrations," so even low accumulations can be a hazard to human health.[143] He noted that CECs used in households may be washed off or flushed into the sanitary sewer, and because CECs "are not treated in typical wastewater treatment processes, the potential exists for low concentrations of CECs being discharged into streams entering Lake Waxahachie."[144] The lake is "a significant water supply" for the City of Waxahachie and surrounding communities.

Protestants assert the ED "failed to sufficiently rebut that these emerging contaminants…will not have an unreasonable effect on the water quality from this development."[145] At minimum, Protestants contend, TCEQ should "require on-going sampling of the discharged wastewater for [CECs] so that it has information regarding these chemicals and can address their impacts in the future if needed."[146]

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[141] App. Ex. 2 at 386.

[142] Prot. Ex. 1 at 21; App. Ex. 2 at 386.

[143] Prot. Ex. 1 at 21.

[144] Prot. Ex. 1 at 21.

[145] Prot. Reply Brief at 10.

[146] Prot. Reply Brief at 10.

2. ED's, Applicant's, and OPIC's evidence and arguments

Ms. Lueg pointed out that the distance from the discharge point to Lake Waxahachie is seven miles, so she felt "minimal CECs will travel to Lake Waxahachie."[147]

Mr. Price testified there are many reasons CECs are not currently regulated, including their large number and diversity; difficulty in documenting their environmental presence, sources, pathways, and persistence; and the absence of established thresholds for effects on humans or wildlife.[148] It is unknown for many CECs whether they will be present in domestic wastewater discharges, will degrade during treatment or after discharge, and whether they will affect humans and/or wildlife at the levels present in receiving waters.[149] Nonetheless, Mr. Price stated, the Draft Permit "includes biomonitoring requirements" so "safeguards are in place to assure that the TSWQS are met and that uses of the receiving waters are not impaired."[150]

OPIC states that "without more information related to the source and nature of potential contamination from CECs, and relevant regulatory statutes, OPIC is unable to find that Applicant has failed to meet its burden" with respect to CECs.[151]

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[147] ED Ex. JL-1 at 19-20.

[148] App. Ex. 2 at 386.

[149] App. Ex. 8 at 386.

[150] App. Ex. 8 at 386-87.

[151] OPIC Closing Brief at 14.

3. ALJ's analysis

The evidence demonstrates that CECs are being studied by the EPA and may be subject to regulation at some point. However, no regulations exist at this time, so there is no evidence to counter the Prima Facie Demonstration that the Draft Permit meets all applicable requirements. The biomonitoring requirements in the Draft Permit will provide a source of information for future study and/or regulatory action by the TCEQ and/or other authorities.

V. TRANSCRIPT COSTS

Applicant incurred a total of $2,055.50 in reporting and transcription costs for the half-day prehearing conference and hearing on the merits.[152] Applicant proposes that one-half of the total costs should be allocated to Applicant and one-half to the three Protestants, collectively. Protestants did not address these costs.

The Commission's rules require consideration of the following factors in assessing transcription costs:

(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;

[152] App. Closing Argument at 12. Although Applicant did not appear to submit receipts for the costs, Protestants did not address or dispute the amount of such costs in their closing or reply briefs.

(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.[153]

The ALJ required that the hearing be transcribed. All parties participated in the hearing and benefitted equally from having a copy of transcript. Neither Applicants nor Protestants presented evidence on their respective ability to pay costs. Protestants are political subdivisions of some size with commensurate resources and were represented by experienced counsel. The ALJ finds it appropriate and consistent with Commission rules to allocate one-half of the total reporting and transcription costs to Applicants and one-half to the Protestants.

VI. CONCLUSION AND RECOMMENDATION

The ALJ finds that Applicant met its burden of proof on all five agreed issues adopted in this direct referral case and recommends that the Draft Permit be issued without amendments.

Signed March 26, 2024

ALJ Signature:

Pratibha J. Shenoy,

Presiding Administrative Law Judge

[153] 30 Tex. Admin. Code § 80.23(d).

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AN ORDER
GRANTING THE APPLICATION BY
HIGHLAND LAKES MIDLOTHIAN I, LLC
FOR NEW TPDES PERMIT NO. WQ15999001
TCEQ DOCKET NO. 2023-0844-MWD;
SOAH DOCKET NO. 582-23-23818

On _____, the Texas Commission on Environmental Quality (TCEQ or Commission) considered the application (Application) of Highland Lakes Midlothian I, LLC (Applicant) for new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0015999001 to discharge treated domestic wastewater from a proposed wastewater treatment facility (Facility) to be located in Ellis County, Texas. A Proposal for Decision (PFD) was issued by Pratibha J. Shenoy, Administrative Law Judge (ALJ) with the State Office of Administrative Hearings (SOAH) and considered by the Commission.

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

I. FINDINGS OF FACT

Application

1. Applicant filed the Application with the Commission on May 25, 2021. The Application requested authorization to discharge treated domestic wastewater from the Facility at a daily average flow not to exceed 0.30 million gallons per day (MGD) at an Interim I volume, 1.20 MGD at an Interim II volume, and 2.76 MGD at a Final volume.

2. The Facility has not been constructed. The plant site will be located approximately 2.7 miles southwest of the intersection of East Farm-to-Market Road 875 and Farm-to-Market Road 663, in Ellis County, Texas.

3. The treated effluent will be discharged into an unnamed tributary; then to South Prong Creek; then to the Soil Conservation Service (SCS) Site 17 Reservoir; then to South Prong Creek; then to Lake Waxahachie (Segment No. 0816 of the Trinity River Basin).

4. TCEQ's Executive Director (ED) declared the Application administratively complete on August 18, 2021, and technically complete on September 30, 2022. The ED completed the technical review of the Application, prepared a draft permit (Draft Permit), and made the Draft Permit available for public review and comment.

Description of Facility

5. The Facility will be an activated sludge process plant operated in the conventional mode. Treatment units in the Interim I phase will include a bar screen, two aeration basins, two final clarifiers, an aerobic sludge digester, and a chlorine contact chamber. Treatment units in the Interim II phase will include a bar screen, five aeration basins, four final clarifiers, two aerobic sludge digesters, and a chlorine contact chamber. Treatment units in the Final phase will include a bar screen, nine aeration basins, seven final clarifiers, four aerobic sludge digesters, and two chlorine contact chambers.

The Draft Permit

6. The Draft Permit would authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 0.30 MGD at an Interim I volume, 1.20 MGD at an Interim II volume, and 2.76 MGD at a Final volume.

7. The effluent limits in the Interim I phase of the Draft Permit, based on a 30-day average, are 10 milligrams per liter (mg/L) five-day carbonaceous biochemical oxygen demand ($CBOD_5$), 15 mg/L total suspended solids (TSS), 3 mg/L ammonia-nitrogen (NH_3-N), 1 mg/L total phosphorus (TP), 126 colony forming units (CFU) or most probable number (MPN) of E. coli per 100 ml, and 4.0 mg/L minimum dissolved oxygen (DO). The effluent shall contain a total chlorine residual of at least 1.0 mg/L and shall not exceed a total chlorine residual of 4.0 mg/L after a detention time of at least 20 minutes based on peak flow.

8. The effluent limitations in the Interim II phase of the Draft Permit, based on a 30-day average, are 5 mg/L five-day $CBOD_5$, 12 mg/L TSS, 2 mg/L NH_3-N, 1 mg/L TP, 126 CFU or MPN of E. coli per 100 ml, and 4.0 mg/L minimum DO. The effluent shall contain a total chlorine residual of at least 1.0 mg/L after a detention time of at least 20 minutes (based on peak flow). The Applicant shall dechlorinate the chlorinated effluent to less than 0.1 mg/L total chlorine residual.

9. The effluent limitations in the Final phase of the Draft Permit, based on a 30-day average, are 5 mg/L five-day $CBOD_5$, 5 mg/L TSS, 1 mg/L NH_3-N, 0.5 mg/L TP, 126 CFU or MPN of E. coli per 100 ml, and 6.0 mg/L minimum DO. The effluent shall contain a total chlorine residual of at least 1.0 mg/L after a detention time of at least 20 minutes (based on peak flow). The Applicant shall dechlorinate the chlorinated effluent to less than 0.1 mg/L total chlorine residual.

10. The effluent limits in the Draft Permit are more stringent than the limits requested in the Application.

11. A Tier 1 antidegradation review has determined that existing water quality uses will not be impaired by this permit action, and numerical and narrative criteria to protect existing uses will be maintained.

12. A Tier 2 antidegradation review has determined that no significant degradation of water quality is expected, and existing uses will be maintained and protected in the SCS Site 17 Reservoir.

13. The Draft Permit does not require review by the United States Environmental Protection Agency (EPA) with respect to the presence of endangered or threatened species.

14. The discharge would not be into an impaired waterbody under the 2020 Texas Integrated Report – Texas 303(d) List.

Notice and Jurisdiction

15. The Notice of Receipt of the Application and Intent to Obtain a Water Quality Permit (NORI) was published in English on September 1, 2021, in the *Waxahachie Sun*, and in Spanish on August 26, 2021, in the *Tex Mex News*.

16. A Combined NORI and Notice of Application and Preliminary Decision (NAPD) was published in English on October 5, 2022, in the *Waxahachie Sun*, and in Spanish on October 6, 2022, in the *Tex Mex News*.

17. Applicant maintained an administratively complete Application in the Midlothian City Hall, in Ellis County, for public viewing.

18. The City of Midlothian, the City of Waxahachie, and Ellis County submitted public comment and requests for hearing on November 4, 2022.

19. The comment period for the Application closed on November 7, 2022.

20. The ED issued her Response to Comments on May 25, 2023.

21. On August 30, 2023, the notice of the preliminary hearing was published in English, in the *Waxahachie Sun*. The notice included the time, date, and place of the hearing, as well as the matters asserted, in accordance with the applicable statutes and rules.

Proceedings at SOAH

22. On April 26, 2023, Applicant requested that the Commission directly refer this case to SOAH for a contested-case hearing. The Commission referred the case to SOAH on July 20, 2023.

23. SOAH ALJ Shenoy convened a preliminary hearing via videoconference on October 2, 2023, and admitted the following as parties: Applicant; the ED; the TCEQ Office of Public Interest Counsel (OPIC); and the City of Midlothian, the City of Waxahachie, and Ellis County (collectively, Protestants). The ALJ established that jurisdiction was proper and admitted the administrative record (Applicant Exhibit 1, Tabs A-E).

24. On October 13, 2023, the parties submitted the following agreed list of issues, which the ALJ adopted by order dated October 23, 2023:

    1. Whether the Draft Permit is adequately protective of water quality, including the protection of surface water in South Prong Creek and Lake Waxahachie, in accordance with applicable regulations including the Texas Surface Water Quality Standards.
    2. Whether the permit should be altered or denied based on Applicant's experience as a facility and system operator.
    3. Whether the application is substantively complete.
    4. Whether the application was properly noticed.
    5. Whether a permit, if issued consistent with the Draft Permit, would protect human health and safety, the environment, and physical property, relating to the discharge of emerging contaminants in the effluent.

25. On January 4, 2024, the ALJ convened a prehearing conference followed by the hearing on the merits, both via videoconference. Applicant was represented by attorneys Helen S. Gilbert, Randall B. Wilburn, and Kerrie Qualtrough. Attorneys Aubrey Pawelka and Allie Soileau represented the ED; attorney Jennifer Jamison represented OPIC; and Protestants were represented by attorneys Emily Rogers and Kimberly G. Kelley. The hearing concluded the same day.

26. At the prehearing conference, the ALJ granted Applicant's motion for summary disposition on Issues 2, 3, and 4. In post-hearing briefs, Protestants urged reconsideration with respect to Issue 4. The record closed with the filing of written reply briefs on February 1, 2024.

Issue 1: **Whether the Draft Permit is adequately protective of water quality, including the protection of surface water in South Prong Creek and Lake Waxahachie, in accordance with applicable regulations including the Texas Surface Water Quality Standards**.

27. The applicable water quality standards are the Texas Surface Water Quality Standards (TSWQS) in 30 Texas Administrative Code chapter 307. The TSWQS apply to surface water in the state and are set by the Commission at levels designed to be protective of public health, aquatic resources, terrestrial life, and other environmental and economic resources.

28. Pursuant to Appendix A of the TSWQS, standards for Segment No. 0816 of the Trinity River Basin (Lake Waxahachie) are primary contact recreation, public water supply, high aquatic life use, and 5.0 mg/L dissolved oxygen.

29. Pursuant to the TSWQS, the unclassified portions of the receiving water were properly assigned uses and criteria as follows: unnamed tributary: intermittent, minimal aquatic life use, 2.0 mg/L DO; South Prong Creek: intermittent with perennial pools, limited aquatic life use, 3.0 mg/L DO; and the SCS Site 17 Reservoir: high aquatic life use, 5.0 mg/L DO.

30. The ED uses the QUAL-TX model to determine appropriate effluent limits for discharges into nontidal freshwater streams. The modeled stream is divided into reaches with similar characteristics. In this case, Reach 1 was the unnamed tributary, Reach 2 was South Prong Creek below the confluence, Reaches 3 and 4 were narrow inundated reaches of the creek at the headwaters of the SCS Site 17 Reservoir, and Reach 5 was the reservoir backwater.

31. The ED typically uses the CSTR model for discharges to small impoundments such as ponds similar to the SCS Site 17 Reservoir.

32. The ED's models are designed to provide estimates of satisfactory permitted effluent limitations for 5-day $CBOD_5$, NH_3-N, and DO. Modeling is performed

under critical conditions of low flow and summer high temperatures. Low flow is defined in Texas as the 7-day, 2-year low flow, or 7Q2. For intermittent streams such as the unnamed tributary and South Prong Creek upstream of the SCS Site 17 Reservoir, that flow is set at zero. The ED used a critical summer high temperature of 30.5 degrees Celsius.

33. The ED used the proper models to assess the impacts of the proposed discharge on the receiving waters.

Stream Geometry Inputs for Modeling

34. The unnamed tributary (Reach 1) has a trapezoidal channel with sloping sides, as opposed to a rectangular channel with vertical sides. The QUAL-TX model utilizes the top width of the water surface in a trapezoidal stream channel in its calculations.

35. In the absence of actual instream measurements under flow conditions for an intermittent stream such as the unnamed tributary, the ED used standardized default hydraulic coefficient inputs in the QUAL-TX model for Reach 1. These inputs have been shown to be representative for Texas streams and have been approved by the TCEQ and the EPA.

36. For Reach 2, South Prong Creek, the ED used site-specific data provided in the Application, using measurements taken when flow was present.

37. The measured slope of Reach 2 from the confluence with the unnamed tributary to the inundated headwaters of the SCS Site 17 Reservoir is 0.0025 ft/ft with a drop of 10 feet over 0.75 miles.

38. The ED's modeled depth in Reach 2 is 5 inches with a velocity of 0.27 ft/s and is very reasonable for a stream of that size and slope at a Final phase flow of 2.76 MGD.

39. As shown by the ED's modeling, the effluent limitations in the Draft Permit will maintain water quality above the TSWQS in all three phases.

Alleged On-channel Impoundment

40. Protestants' expert, Tim Osting, visited the proposed Facility site on October 13, 2023.

41. The area received a 2.25-inch rainfall on October 4-5, 2023, about a week before the site visit, and about 4.5 inches of rain in the previous month. During his site visit, Mr. Osting observed a pool at Location 215 on the unnamed tributary, which he characterized as an on-channel impoundment.

42. The rainfall events immediately prior to the site visit created and filled temporary pools in the watercourse.

43. Applicant's representatives made multiple site visits to the unnamed tributary and found the tributary to be in a consistently dry condition.

44. The pool at Location 215 is visible from Google Earth data on only one date, March 21, 2018, over five years prior to Mr. Osting's site visit.

45. The pool observed at Location 215 on October 13, 2023, is not a perennial pool and would not exist during critical conditions as used in the QUAL-TX model.

46. If present during flow conditions once discharge commences from the Facility, the pool would not be isolated and stagnant.

47. An impoundment is a body of water confined within an enclosure, such as a reservoir.

48. There is no on-channel impoundment located on the unnamed tributary.

49. The ED properly characterized the unnamed tributary as an intermittent stream with a minimal aquatic life use.

Baseline DO Saturation in Modeling

50. The IPs specify the appropriate procedure for modeling DO and designate the 24-hour mean DO as the principal criterion of concern.

51. Effects on DO due to the presence of aquatic plants are usually not considered.

52. Per the IPs and QUAL-TX standard operating procedures (SOPs), a default DO saturation of 80% is assumed unless sufficient and robust site-specific data exists for 24-hour average DO, typically obtained from surface water quality monitoring (SWQM) stations over a number of years.

53. There are no SWQM stations along the unnamed tributary, South Prong Creek, or the SCS Site 17 Reservoir.

54. During his October 13, 2023 site visit, Mr. Osting measured DO of 0.78 mg/L at Location 215, 3.01 mg/L downstream, and 3.67 mg/L in Reach 3. He calculated a DO saturation below 45%.

55. Mr. Osting's DO reading of 0.78 mg/L at Location 215 was taken in stagnant water full of debris and sediment after the rainfall event. Under discharge flow, the pool—if present—will not be stagnant or isolated.

56. Mr. Osting's DO readings of 3.01 mg/L downstream and 3.67 mg/L in Reach 3 are single data points, not 24-hour averages.

57. Mr. Osting measured specific conductance of 55 microsiemens per centimeter (µS/cm) in the SCS Site 17 Reservoir, but the 50-year average specific conductance taken at the SWQM station for Lake Waxahachie is 227 µS/cm. The comparison indicates Mr. Osting's measurements may be unreliable. On the whole, Mr. Osting's three DO measurements fall far short of the data required to develop site-specific daily average DO saturation values.

58. The ED's modeling complied with the IPs and QUAL-TX SOPs by using a default DO saturation of 80%.

Phosphorus Loading

59. Modeling nutrients like phosphorus and nitrogen is complex because nutrients undergo various chemical, physical, and biological changes and interactions that are difficult to predict. As a result, the ED does not run a model for TP or other nutrients.

60. Instead, the IPs have a screening process for phosphorus loading that the ED uses to determine a phosphorus limit for a permit. The Nutrient Screening Criteria in the IPs include proposed discharge flow rates, instream dilution, substrate type, depth, stream type, shading, impoundments, water clarity, sensitivity to growth of aquatic vegetation, existing water quality concerns and impairments, and consistency with other permits in the area.

61. Mr. Osting took a water sample during his October 13, 2023 site visit that produced a TP result of 0.0756 mg/L. However, the sample was analyzed past its EPA-established hold time and the integrity of the sample and validity of the results are in doubt.

62. Even if the 0.0756 mg/L value was accurate, there is no numeric standard for phosphorus in the TSWQS for any water body in the proposed discharge route.

63. There are no current impairments in Lake Waxahachie due to TP or algae.

64. Typical domestic wastewater discharges contain TP concentrations higher than 0.5 mg/L and many TCEQ-issued domestic wastewater permits do not have any TP limits.

65. As a result of the ED's nutrient screening under the IPs, the ED included effluent limits of 1.0 mg/L TP in the Interim I and II phases and 0.5 mg/L TP in the Final phase of the Draft Permit.

66. The TP limits in the Draft Permit are appropriate and protect water quality in the receiving stream as required by the TSWQS.

Antidegradation

67. In general, a Tier 1 antidegradation review is conducted for all permits and applies to all water in the state. It ensures that, although a proposed discharge will result in increased pollutant loading, the numerical and narrative criteria of the receiving water will be maintained, and existing uses will be protected.

68. Tier 2 antidegradation review generally applies to water bodies where water quality exceeds levels necessary to support propagation of fish, shellfish,

terrestrial life, recreation in and on the water (fishable/swimmable quality), and intermediate, high, or exceptional aquatic life uses. The Tier 2 review also ensures that although a proposed discharge may result in increased pollutant loading, the higher numerical and narrative criteria of fishable/swimmable quality waters will be maintained, and existing uses will be protected.

69. As shown by the ED's Tier 1 antidegradation review, numerical and narrative criteria to protect existing uses will be maintained throughout the receiving waters. Existing water uses will not be impaired by discharges under the Draft Permit.

70. As shown by the ED's Tier 2 antidegradation review, discharges under the Draft Permit will not cause significant degradation of water quality in the SCS Site 17 Reservoir which has been identified as having a high aquatic life use and existing uses will be maintained and protected with the TP limits. Also, chlorine disinfection as required by the Draft Permit will limit the concentration of viable E. coli in the effluent to a level that will not impair primary recreational uses of those waters.

71. The ED properly performed a Tier 1 and Tier 2 antidegradation review.

72. The Draft Permit has been prepared in accordance with the June 2010 Procedures to Implement the Texas Surface Water Quality Standards (RG-194) (IPs) to be consistent with the TSWQS.

73. The Draft Permit includes effluent limits, general requirements, and other requirements such as disinfection method, monitoring procedures and frequencies for conventional parameters, and both acute and chronic biomonitoring.

Issue 2: **Whether the permit should be altered or denied based on the Applicant's experience as a facility and system operator**.

74. No party presented evidence rebutting the prima facie demonstration that the permit should not be altered or denied based on Applicant's experience as a facility and system operator.

75. The permit should not be altered or denied based on Applicant's experience as a facility and system operator.

Issue 3: **Whether the Application is substantively complete**.

76. No party presented evidence rebutting the prima facie demonstration that the Application is substantively complete.

77. The Application is substantively complete.

Issue 4: **Whether the Application was properly noticed**.

78. The applicable rules do not prohibit the ED from issuing a combined NORI/NAPD as was done in this case.

79. Applicant published the notices as directed by the Chief Clerk of TCEQ.

80. Applicant maintained an administratively complete application in a public place in Ellis County for public viewing.

81. The evidence does not demonstrate that any party was harmed by the notice provided.

Issue 5: **Whether a permit, if issued consistent with the Draft Permit, would protect human health and safety, the environment, and physical property, relating to the discharge of emerging contaminants in the effluent**.

82. The term Contaminants of Emerging Concern (CECs) refers to a diverse set of materials, including prescription drugs, hormones originating in human and animal wastes, and a wide variety of commercial and industrial chemicals presently circulating in the environment.

83. CECs are not currently regulated for several reasons, including their large number and diversity; the inability to reliably document their occurrence and abundance at environmentally relevant concentrations; lack of understanding of their environmental presence, sources, pathways, and persistence; and

because thresholds of effect on humans or wildlife have not been established, particularly when encountered at environmental levels.

84. Depending on the particular material of concern, 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.

85. No federal or state regulatory schemes currently address CECs.

86. The Draft Permit includes biomonitoring requirements.

87. The Draft Permit would protect human health and safety, the environment, and physical property relating to the discharge of emerging contaminants in the effluent.

II. CONCLUSIONS OF LAW

1. TCEQ has jurisdiction over this matter. Tex. Water Code chs. 5, 26.

2. SOAH has jurisdiction to conduct a hearing and to prepare a PFD in contested cases referred by the Commission under Texas Government Code § 2003.047.

3. Notice was provided in accordance with Texas Water Code §§ 5.114 and 26.028, Texas Government Code §§ 2001.051-.052, and 30 Texas Administrative Code §§ 39.405 and .551.

4. The Application is subject to the requirements in Senate Bill 709, effective September 1, 2015. Tex. Gov't Code § 2003.047(i-1)-(i-3).

5. The Administrative Record established a prima facie demonstration that: (1) the Draft Permit meets all state and federal legal and technical requirements; and (2) a permit, if issued consistent with the Draft Permit, would protect human health and safety, the environment, and physical property. Tex. Gov't Code § 2003.047(i-1); 30 Tex. Admin. Code § 80.17(c)(1).

6. Applicant retains the burden of proof on the issues regarding the sufficiency of the Application and compliance with the necessary statutory and regulatory requirements. 30 Tex. Admin. Code § 80.17(a).

7. To rebut the prima facie demonstration, a party must present evidence that (1) relates to a matter referred under Texas Water Code § 5.557; and (2) demonstrates that one or more provisions in the Draft Permit violates a specifically applicable state or federal requirement. Tex. Gov't Code § 2003.047(i-2); 30 Tex. Admin. Code § 80.17(c)(2).

8. No party rebutted the prima facie demonstration. Tex. Gov't Code § 2003.047(i-2); 30 Tex. Admin. Code § 80.117(c).

9. The Draft Permit is adequately protective of water quality, including the protection of surface water, groundwater, and animals in accordance with applicable regulations including the TSWQS in 30 Texas Administrative Code chapter 307.

10. The Draft Permit is protective of human health and safety, the environment, and physical property, relating to the discharge of emerging contaminants in the effluent.

11. Applicant's compliance history and technical capabilities do not raise any issues regarding Applicant's ability to comply with the material terms of the permit that warrant denying or altering the terms of the permit.

12. Applicant substantially complied with applicable public notice requirements. 30 Tex. Admin. Code § 39.551(c).

13. No transcript costs may be assessed against the ED or OPIC because the TCEQ's rules prohibit the assessment of any cost to a statutory party who is precluded by law from appealing any ruling, decision, or other act of the Commission. 30 Tex. Admin. Code § 80.23(d)(2).

14. Factors to be considered in assessing transcript costs include: the party who requested the transcript; the financial ability of the party to pay the costs; the extent to which the party participated in the hearing; the relative benefits to the various parties of having a transcript; the budgetary constraints of a state

or federal administrative agency participating in the proceeding; and any other factor which is relevant to a just and reasonable assessment of the costs. 30 Tex. Admin. Code § 80.23(d)(1).

15. Considering the factors in 30 Texas Administrative Code § 80.23(d)(1), a reasonable assessment of hearing transcript costs against parties to the contested case proceeding is 50% to Applicant and 50% collectively to Protestants.

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

1. Applicant's Application for Texas Pollutant Discharge Elimination System Permit No. WQ15999001 is granted as set forth in the Draft Permit.

2. Applicant must pay 50% of the reporting and transcription costs. Protestants (the City of Waxahachie, the City of Midlothian, and Ellis County) must collectively pay 50% of the reporting and transcription costs.

3. The Commission adopts the ED's Response to Public Comment in accordance with 30 Texas Administrative Code § 50.117(f).

4. All other motions, requests for entry of specific Findings of Fact or Conclusions of Law, and any other requests for general or specific relief, if not expressly granted herein, are hereby denied.

5. The effective date of this Order is the date the Order is final, as provided by Texas Government Code § 2001.144 and 30 Texas Administrative Code § 80.273.

6. TCEQ's Chief Clerk shall forward a copy of this Order to all parties.

7. If any provision, sentence, clause, or phrase of this Order is for any reason held to be invalid, the invalidity of any provision shall not affect the validity of the remaining portions of this Order.

ISSUED:

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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Jon Niermann, Chairman, For the Commission