# State Office of Administrative Hearings

Kristofer S. Monson Chief Administrative Law Judge

February 7, 2024

Peter Gregg, Attorney for Applicant Undine Texas Environmental, LLC

Matt Edquist, Attorney for Protestant Ronnie Autry

Stefanie Albright and Emily Rogers Attorneys for Protestant, Brazoria County

Kathy Humphreys, Attorney for Executive Director Texas Commission on Environmental Quality

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**VIA EFILE TEXAS** 

VIA EFILE TEXAS

VIA EFILE TEXAS

VIA EFILE TEXAS

RE: SOAH Docket Number 582-23-20937; TCEQ Docket No. 2023-0163-MWD; Application of Undine Texas Environmental, LLC for TPDES Permit No. WQ0016046001

Dear Parties:

Please find attached a Proposal for Decision (PFD) 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 <u>http://www14.tceq.texas.gov/epic/eFiling/</u> or by filing an original and seven copies with the Chief Clerk of the TCEQ. Failure to provide copies may be grounds for withholding consideration of the pleadings.

CC: Service List

# BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

APPLICATION BY UNDINE TEXAS ENVIRONMENTAL, LLC FOR TPDES PERMIT NO. WQ0016046001

#### **PROPOSAL FOR DECISION**

Undine Texas Environmental, 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. WQ0016046001 to discharge treated domestic wastewater from a proposed wastewater treatment facility (Facility) located in Brazoria County, Texas. The Administrative Law Judge (ALJ) recommends the Application be granted.

#### I. NOTICE, JURISDICTION, AND PROCEDURAL HISTORY

There are no contested issues of notice or jurisdiction in this case; 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).

Application filed the Applicant on September 24. 2021. Protestants Brazoria County (County) and Ronnie Gene Autry opposed the Application. The Commission determined that the County and Mr. Autry, (collectively, Protestants), qualified as an affected person, granted their hearing requests, and referred the matter to the State Office of Administrative Hearings (SOAH) for a hearing on three issues. At the preliminary hearing on August 14, 2023, Applicant, the Executive Director (ED) of the Commission, the Office of Public Interest Counsel (OPIC), County and Mr. Autry were named parties to the proceeding.

On November 15, 2023, ALJ Linda Brite of SOAH convened a hybrid (in-person/videoconference) hearing on the merits in Austin, Texas. Applicant was represented by attorney Peter Gregg. The ED was represented by attorney Kathy Humphreys. OPIC was represented by attorney Jennifer Jamison. The County was represented by attorneys Stefanie Albright and Emily Rogers. Mr. Autry was represented by attorney Matt Edquist. The record closed after submission of closing briefs on December 12, 2023.

#### II. APPLICABLE LAW

#### A. BURDEN OF PROOF

Applicant, as the moving party, bears the burden of proof by a preponderance of the evidence.<sup>1</sup> The Application was filed after September 1, 2015, and the Commission referred it to SOAH under Texas Water Code section 5.556, which governs referral of environmental permitting cases to SOAH.<sup>2</sup> Therefore, this case is subject to Texas Government Code section 2003.047(i-1)-(i-3),<sup>3</sup> which provides:

- (i-1) In a contested case regarding a permit application referred under Section 5.556... [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.
- (i-2) A party may rebut a demonstration under Subsection (i-1) by presenting evidence that:

<sup>&</sup>lt;sup>1</sup> 30 Tex. Admin. Code § 80.17(a); 1 Tex. Admin. Code § 155.427.

<sup>&</sup>lt;sup>2</sup> Tex. Water Code §§ 5.551(a), .556.

<sup>&</sup>lt;sup>3</sup> Acts 2015, 84th Leg., R.S., ch. 116 (S.B. 709), §§ 1 and 5, eff. Sept. 1, 2015.

- (1) relates to . . . an issue included in a list submitted under Subsection (e) in connection with a matter referred under Section 5.556, Water Code; and
- (2) demonstrates that one or more provisions in the draft permit violate a specifically applicable state or federal requirement.
- (i-3) If in accordance with Subsection (i-2) a party rebuts a presumption established under Subsection (i-1), the applicant and the executive director may present additional evidence to support the draft permit.

Although this law creates a presumption, sets up a method for rebutting that presumption, and shifts the burden of production on that rebuttal, it does not change the underlying burden of proof. Accordingly, the burden of proof remains with the Applicant to establish by a preponderance of the evidence that the Application would not violate applicable requirements and that a permit, if issued consistent with the draft permit, would protect human health and safety, the environment, and physical property.<sup>4</sup>

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 August 14, 2023.<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> 30 Tex. Admin. Code § 80.17(a), (c).

<sup>&</sup>lt;sup>5</sup> App. Exs. A (Tab A through D) and B (Tab E).

#### **B.** WASTEWATER DISCHARGE PERMIT REQUIREMENTS

Chapter 26 of the Texas Water Code requires a person who seeks to discharge wastewater into Texas water to file an application with TCEQ. 30 Texas Administrative Code, chapter 305, subchapter C contains TCEQ's application filing requirements. Once an application is filed, TCEQ reviews the application 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. 30 Texas Administrative Code, chapter 305, subchapter F contains standard permit requirements, which TCEQ has adapted specifically for use in wastewater discharge permits. All wastewater discharge permits are also subject to regulations found in 30 Texas Administrative Code, chapter 319, which require the permittee to monitor its 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.<sup>6</sup> The TSWQS and IPs are used in reviewing permit applications.<sup>7</sup>

The TSWQS require that proposed wastewater discharges undergo an antidegradation review.<sup>8</sup> 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."<sup>9</sup> Tier 2 is more stringent and generally prohibits the lowering of water quality by more than a de minimis amount for waters that exceed fishable/swimmable quality, unless it can be shown that lowering is necessary for important economic or social development.<sup>10</sup>

#### **III.** THE DRAFT PERMIT

The Draft Permit would authorize the discharge of treated domestic wastewater from the Facility at a daily average flow not to exceed 0.0625 million gallons per day (MGD) in the Interim I phase, 0.125 MGD in the Interim II phase, and 0.250 MGD in the Final phase. The Facility will be located approximately 2,900 feet southwest of the intersection of County Road 220 and Old Angleton Road in

<sup>&</sup>lt;sup>6</sup> 30 Tex. Admin. Code § 307.2(e).

<sup>&</sup>lt;sup>7</sup> App. Ex. A at A000166 (the IPs (RG-194) (Jun. 2010)).

<sup>&</sup>lt;sup>8</sup> 30 Tex. Admin. Code § 307.5(b).

<sup>&</sup>lt;sup>9</sup> 30 Tex. Admin. Code § 307.5(b)(1).

<sup>&</sup>lt;sup>10</sup> 30 Tex. Admin. Code § 307.5(b)(2).

Brazoria County, Texas. The treated effluent would be discharged via pipe to Angleton Drainage District Ditch (Ditch) 7, thence to Ditch 22, thence to Bastrop Bayou Tidal in Segment No. 1105 of the San Jacinto-Brazos Coastal Basin. The unclassified receiving water uses are minimal aquatic life use for Ditch 7 and Ditch 22 (non-tidal) and high aquatic life use for Ditch 22 (tidal). The designated uses for Segment No. 1105 are primary contact recreation and high aquatic life use.<sup>11</sup>

After the prefiled direct testimony of the County's expert, Dr. Lauren Ross, ED staff reassessed the characterization of the Ditches and determined that the Ditches are intermittent with perennial pools, rather than intermittent.<sup>12</sup> As a result, the dissolved oxygen (DO) requirement of the receiving waters increased from 2.0 mg/L to 3.0 mg/L.<sup>13</sup>

#### **IV. DISCUSSION**

The Commission referred three issues to SOAH for a contested case hearing:

- a) Whether the draft permit will be protective of surface water quality and preserve the designated uses of the discharge route in accordance with the Texas Surface Water Quality Standards and be protective of groundwater in the area;
- b) Whether the draft permit is protective of human health of residents in the immediate vicinity of the proposed facility and the immediate discharge route; and

<sup>&</sup>lt;sup>11</sup> App. Ex. A at A000011.

<sup>&</sup>lt;sup>12</sup> ED Ex. MW-1 at 5.

<sup>&</sup>lt;sup>13</sup> ED Ex. MW-1 at 7-8.

c) Whether the draft permit is protective of aquatic life, wildlife, and livestock in the immediate vicinity of the proposed facility and discharge route.<sup>14</sup>

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.<sup>15</sup>

At the hearing on the merits, the County had nine exhibits admitted, which included the prefiled testimony of Dr. Ross.<sup>16</sup> Mr. Autry had two exhibits admitted, which included his prefiled testimony.<sup>17</sup>

The ED and Applicant presented additional evidence in response to evidence offered by Protestants. At the hearing, Applicant had five exhibits admitted, which included the prefiled testimony of Levi Love and Janet Sims.<sup>18</sup> The ED had 13 exhibits admitted, which included the prefiled testimony of Dr. Mary Anne Wallace, Dr. Xing Lu, and Venkata Kancharla.<sup>19</sup> OPIC offered no testimony or exhibits.

<sup>&</sup>lt;sup>14</sup> App. Ex. A, Tab. A.

<sup>&</sup>lt;sup>15</sup> Tex. Gov't Code § 2003.047(i-1).

<sup>&</sup>lt;sup>16</sup> County Exs. 1 through 9.

<sup>&</sup>lt;sup>17</sup> Autry Exs. 1 and 2.

<sup>&</sup>lt;sup>18</sup> App. Exs. 1 through 5.

 $<sup>^{19}</sup>$  ED Exs. MW-1 through MW 4, XL-1 through XL 6, and VK-1 and VK-2.

# A. SURFACE WATER QUALITY (REFERRED ISSUE A) AND AQUATIC LIFE, WILDLIFE, AND LIVESTOCK (REFERRED ISSUE C)

#### 1. QUAL-TX Model

The County contends that the Draft Permit relied on incorrect modeling assumptions and is not protective of water quality. TCEQ did not model information specific to the Ditches and instead used standard hydraulic coefficients for stream dimensions, velocity, and flow characteristics.<sup>20</sup> The County challenges the model's prediction of a "typical" Texas stream as having flow that is 6.8 meters wide and 5 inches deep.<sup>21</sup> Dr. Ross characterized this modeling prediction as an unreasonably wide and shallow effluent flow that results in a "gross over-prediction of water re-aeration."<sup>22</sup> According to Dr. Ross, the mischaracterization of the flow width and the resultant effluent limits will cause low DO levels that would be harmful to aquatic life.<sup>23</sup> Dr. Ross testified that the effluent limits in the Draft Permit will decrease DO concentrations in the Ditches, which will negatively impact aquatic life.<sup>24</sup>

Mr. Autry testified that even though the Ditches typically have no consistent water flow, they contain persistent pools that exist year-round and contain fish.<sup>25</sup>

<sup>25</sup> Tr. at 27-28.

<sup>&</sup>lt;sup>20</sup> ED Ex. XL-1 at 10.

<sup>&</sup>lt;sup>21</sup> See Transcript (Tr.) at 40.

<sup>&</sup>lt;sup>22</sup> County Ex. 1 at 16.

<sup>&</sup>lt;sup>23</sup> County Ex. 1 at 20, 25; Tr. at 67.

<sup>&</sup>lt;sup>24</sup> County Ex. 1 at 20; Tr. at 67.

The Ditch is used by the Autry family and other members of the public for fishing, swimming, wading, and other recreational activities.<sup>26</sup> Mr. Autry's domestic animals and wildlife use the water bodies as well.<sup>27</sup>

ED witness Dr. Lu did not utilize any site-specific information when assessing the Application but acknowledged that site-specific information may be different from the standard coefficients used in the QUAL-TX modeling.<sup>28</sup> Applicant did not submit site-specific information relating to the Ditches, so the ED staff used only generalized hydraulic assumptions when determining how the proposed discharge would impact the Ditches.<sup>29</sup> The ED staff did not request additional site-specific data because it was not required.<sup>30</sup> Although the ED staff made a site visit to the proposed discharge and discharge route, they did not confirm whether the site was generally consistent with the standard hydraulic coefficients.<sup>31</sup> The Water Quality Assessment Team Methods for Analyzing Dissolved Oxygen in Freshwater Streams Using and Uncalibrated QUAL-TX Model (SOPs)<sup>32</sup> recognizes that the "hydraulic depiction of the stream in the model has a large and direct bearing on the model results."<sup>33</sup> Therefore, Protestants contend that the Draft Permit based on the inaccurate

<sup>28</sup> Tr. at 91.

<sup>&</sup>lt;sup>26</sup> Autry Ex. 1 at 4.

<sup>&</sup>lt;sup>27</sup> Autry Ex. 1 at 4.

<sup>&</sup>lt;sup>29</sup> Tr. at 92.

<sup>&</sup>lt;sup>30</sup> Tr. at 92.

<sup>&</sup>lt;sup>31</sup> Tr. at 93-94.

<sup>&</sup>lt;sup>32</sup> ED Ex. XL-6.

<sup>&</sup>lt;sup>33</sup> ED Ex. XL-6 at 2; Tr. at 95.

modeling is not protective of water quality, human health, or aquatic life, wildlife, and livestock, and violates the TSWQS provisions relating to antidegradation found in 30 Texas Administrative Code section 307.5.

Applicant does not contest Dr. Ross's stream characterization as intermittent with perennial pools. Ms. Sims testified that the Draft Permit is protective of water quality in accordance with the TSWQS. Ms. Sims opined that the Draft Permit is protective of aquatic life, wildlife, and livestock in the immediate vicinity of the Facility and discharge route, testifying that the effluent quality limitations are adequate to maintain the DO level for the applicable aquatic life uses. Ms. Sims stated that the effluent limits are based on the results of the QUAL-TX model that indicate the DO concentrations necessary to protect the aquatic life in the vicinity of the proposed discharge in Ditch 7 and the non-tidal portion of Ditch 22 are maintained above 3.0 mg/L and the DO concentrations in the tidal portion of Ditch 22 is maintained above 4.0 mg/L.<sup>34</sup>

#### 2. Enterococci

The County posits that TCEQ failed to evaluate enterococci. The water quality standards for Segment No. 1105 Bastrop Bayou Tidal includes enterococci as the indicator for bacteria.<sup>35</sup> However, TCEQ only included *e.coli* in its analysis, claiming the discharge is to freshwater.<sup>36</sup> Dr. Ross testified that enterococci is the

<sup>&</sup>lt;sup>34</sup> App. Ex. 3 at 8.

<sup>&</sup>lt;sup>35</sup> County Ex. 1 at 17.

<sup>&</sup>lt;sup>36</sup> ED Ex. MW-1 at 8-9.

appropriate indicator bacteria because Bastrop Bayou Tidal Segment No. 1105 is a tidal segment as listed in the Texas Water Quality Inventories since 2002.<sup>37</sup> According to Dr. Ross, only the first stretch of the Ditches are freshwater, and enterococci levels are regularly exceeded in Bastrop Bayou.<sup>38</sup> Neither TCEQ nor Applicant assessed enterococci as an indicator bacteria for the segment, despite TCEQ designating Segment 1105 as non-supporting for Primary Contact Recreation 1 in the Texas Water Quality Inventories prepared since 2010.<sup>39</sup> Therefore, Protestants urge that the Application should be denied because the Draft Permit is not protective of water quality, human health, aquatic life, wildlife, or livestock.

ED witness Dr. Wallace testified that the discharge is to a freshwater ditch because it is above the five-foot contour line, which is considered the tidal boundary.<sup>40</sup> Applicant witness Ms. Sims testified that the characteristics of the water in the Ditches for 3.7 kilometers downstream of the outfall is freshwater.<sup>41</sup> Ms. Sims agreed with Dr. Ross that enterococci is the appropriate indicator bacteria for Segment No. 1105 Bastrop Bayou Tidal. However, under 30 Texas Administrative Code section 309.3(h)(1)(A), *e.coli* must be the indicator bacteria measured for

<sup>&</sup>lt;sup>37</sup> County Ex. 1 at 17.

<sup>&</sup>lt;sup>38</sup> County Ex. 1 at 18; Tr. at 38.

<sup>&</sup>lt;sup>39</sup> County Ex. 1 at 18-19.

<sup>&</sup>lt;sup>40</sup> ED Ex. MW-1 at 8-9.

<sup>&</sup>lt;sup>41</sup> App. Ex. 3 at 6.

discharges to freshwater. <sup>42</sup> Similarly, the IPs provide *e.coli* criteria for freshwater and enterococci criteria for salt water.<sup>43</sup>

#### 3. ED's and OPIC's Positions

Dr. Wallace reassessed the aquatic life use from minimal aquatic life use to limited aquatic life use and changed the DO requirement from 2.0 mg/L to 3.0 mg/L for Ditch 7 and Ditch 22 (non-tidal).<sup>44</sup> Dr. Lu testified that based on her revised modeling, the effluent set of 10 mg/L CBOD<sub>5</sub>,<sup>45</sup> 3.0 mg/L ammonia-nitrogen, and 4.0 mg/L minimum DO, is predicted to be adequate to maintain the DO levels above the criteria of 4.0 mg/L for Ditch 7, Ditch 22 (non-tidal), and Ditch 22 (tidal).<sup>46</sup> ED and OPIC posit that the Draft Permit will be protective of surface water quality and preserve the designated uses of the discharge route in accordance with the TSWQS. They also contend the Draft Permit is protective of aquatic life, wildlife, and livestock in the immediate vicinity of the proposed discharge route.

### 4. ALJ's Analysis

It is uncontested that the stream characterization of the receiving Ditches is intermittent with perennial pools. The County challenged the QUAL-TX modeling based on the characterization of the flow as 6.8 meters wide and 5 inches deep.

<sup>&</sup>lt;sup>42</sup> App. Ex. 3 at 6.

<sup>&</sup>lt;sup>43</sup> App. Ex. A, Tab C at A000189.

<sup>&</sup>lt;sup>44</sup> ED Ex. MW-1 at 5; App. Ex. A, Tab C at A000163; ED Ex. MW-4 at 0020.

 $<sup>^{45}</sup>$  CBOD5 means five-day carbonaceous biochemical oxygen demand. ED Ex. XL-1 at 3.

<sup>&</sup>lt;sup>46</sup> ED Ex. XL-1 at 7.

However, those characteristics were not inputs into the model, as Dr. Lu testified that she did not utilize any site-specific information when assessing the Application. Applicant is not required to submit site-specific data; instead, general hydraulic assumptions can be used when determining how the proposed discharge would impact the Ditches.

The County argued that enterococci should be the indicator bacteria because Bastrop Bayou Tidal Segment No. 1105 is a tidal segment. Dr. Wallace and Ms. Sims credibly testified that the discharge is to freshwater. Dr. Ross acknowledged that the first stretch of the Ditches is freshwater. The record establishes that the discharge is to freshwater. Therefore, *e.coli* is the appropriate indicator bacteria pursuant to 30 Texas Administrative Code section 309.3(h)(1)(A).

The ALJ concludes that the Draft Permit will be protective of surface water quality and preserve the designated uses of the discharge route in accordance with the TSWQS and is protective of aquatic life, wildlife, and livestock in the immediate vicinity of the proposed discharge route.

# B. GROUNDWATER (REFERRED ISSUE A) AND HUMAN HEALTH (REFERRED ISSUE B)

#### 1. Protestants' Position

Mr. Autry has two groundwater wells that are used for household purposes and livestock. The wells are located approximately a half mile from the proposed discharge, and approximately 150-200 feet from Ditch 7.<sup>47</sup> Dr. Ross testified that the discharge could potentially impact local groundwater wells, particularly Mr. Autry's wells.<sup>48</sup> There was no indication that Applicant and TCEQ evaluated any factors related to potential for groundwater contamination.<sup>49</sup>

The County contends that TCEQ relied on an inaccurate assumption that protection of surface water equates to protection of groundwater quality.<sup>50</sup> TCEQ did not conduct an assessment relating to the impact of the proposed discharge on groundwater.<sup>51</sup> The proposed effluent will flow over earthen channels over the recharge zone of the Chicot and Evangeline Aquifers, which are sources of drinking water in the area.<sup>52</sup> Dr. Ross identified 210 wells within a half-mile of the receiving water downstream along a 12- to 15-mile stretch of the proposed discharge route.<sup>53</sup> Dr. Ross explained that: pathogens, including nitrate, would potentially discharge into the underlying groundwater; nitrate can cause serious and life-threatening conditions in infants and is linked to occurrences of colorectal, bladder, and breast cancer, as well as thyroid disease and neural tube defects; and nitrate can persist for decades in groundwater.<sup>54</sup> Based on the possibility of pollutants, such as nitrate,

<sup>49</sup> County Ex. 1 at 22.

<sup>&</sup>lt;sup>47</sup> Autry Ex. 1 at 4.

<sup>&</sup>lt;sup>48</sup> County Ex. 1 at 20-21.

<sup>&</sup>lt;sup>50</sup> See Tr. at 85.

<sup>&</sup>lt;sup>51</sup> Tr. at 84.

<sup>&</sup>lt;sup>52</sup> Tr. at 49.

<sup>&</sup>lt;sup>53</sup> County Ex. 1 at 23; Tr. at 64.

<sup>&</sup>lt;sup>54</sup> County Ex. 1 at 24-25.

Protestants contend that the Draft Permit is not protective of groundwater quality or human health.

#### 2. Applicant's Position

Ms. Sims opined that the Draft Permit is protective of human health of residents in the immediate vicinity of the Facility and the immediate discharge route, because the Facilities will utilize chlorine disinfection of the wastewater and comply with applicable water quality standards for primary contact recreational uses.<sup>55</sup>

According to Ms. Sims, the Draft Permit is protective of groundwater and water supply wells in accordance with Public Drinking Water regulations because it complies with the location standards for wastewater treatment facilities as established in 30 Texas Administrative Code sections 290.41(c) and 309.13. The Draft Permit complies with 30 Texas Administrative Code section 309.13, which describes unsuitable site characteristics for a domestic wastewater plant site. This section requires a wastewater treatment plant to be at least 500 feet from a public water well as provided by section 290.41(c)(1)(B) and at least 250 feet from a private water well.<sup>56</sup> Ms. Sims stated that if the surface water quality will be protected under the Draft Permit, then groundwater quality in the vicinity will not be impacted by the discharge.<sup>57</sup>

<sup>&</sup>lt;sup>55</sup> App. Ex. 3 at 7-8.

<sup>&</sup>lt;sup>56</sup> App. Ex. 3 at 7.

<sup>&</sup>lt;sup>57</sup> App. Ex. 3 at 7.

#### 3. ED's and OPIC's Positions

Dr. Wallace testified that an independent determination of the potential impact to groundwater is not performed for TPDES applications because TPDES permits are drafted to be protective of surface water and, thus, will be protective of groundwater in the vicinity.<sup>58</sup> She stated that a groundwater assessment is only required for a discharge to surface water if the discharge is to an area with specific rules, such as for aquifer protection.<sup>59</sup> The ED and OPIC agree that the Draft Permit will be protective of groundwater and human health in the area.

## 4. ALJ's Analysis

Dr. Ross testified that the discharge could potentially impact local groundwater wells via pathogens such as nitrate reaching the underlying groundwater. However, her presentation of such a possibility—without addressing the probability or any site-specific data—does not overcome Applicant's prima facie demonstration that the Draft Permit is protective of groundwater and human health. The Draft Permit complies with the siting requirements of TCEQ rules. Protestants did not identify any particular requirement that Applicant failed to meet. Additionally, under TCEQ's standing policy, a draft permit that is protective of surface water quality will also be protective of groundwater in the vicinity. Therefore, the ALJ concludes that the Draft Permit will be protective of

<sup>&</sup>lt;sup>58</sup> ED Ex. MW-1 at 8; Tr. at 84-85.

<sup>&</sup>lt;sup>59</sup> Tr. at 84.

groundwater in the area and human health of residents in the immediate vicinity of the Facility and the immediate discharge route .

# V. TRANSCRIPT COSTS

The Commission's rules require transcription costs to be assessed after consideration of the following factors:

- (A) the party who requested the transcript;
- (B) the financial ability of the party to pay the costs;
- (C) the extent to which the party participated in the hearing;
- (D) the relative benefits to the various parties of having a transcript;

(E) the budgetary constraints of a state or federal administrative agency participating in the proceeding;

(F) in rate proceedings, the extent to which the expense of the rate proceeding is included in the utility's allowable expenses; and

(G) any other factor which is relevant to a just and reasonable assessment of costs. $^{60}$ 

Here, no party has presented evidence on the amount of costs incurred. Neither OPIC nor the ED may be assessed transcript costs.<sup>61</sup> Applicant urged the transcript costs be allocated to equally among the three non-agency parties. Applicant and the County participated in the hearing and benefitted equally from having a copy of transcript, whereas Mr. Autry participated in the hearing to a very limited extent. As a for-profit company, Applicant likely has more financial ability to pay than the County or an individual landowner. Applicant seeks issuance of the

<sup>&</sup>lt;sup>60</sup> 30 Tex. Admin. Code § 80.23(d)(1).

<sup>&</sup>lt;sup>61</sup> 30 Tex. Admin. Code § 80.23(d)(2).

permit, whereas Mr. Autrey and the County seek to preserve the status quo. Therefore, the ALJ recommends that all transcript costs be allocated to Applicant.

#### VI. CONCLUSION AND RECOMMENDATION

The ALJ concludes that the Applicant met its burden of proving that the Draft Permit complies with all applicable legal and technical requirements. Accordingly, the ALJ recommends that the Commission adopt the attached proposed order containing Findings of Fact and Conclusions of Law and issue the Draft Permit to Applicant.

Signed February 7, 2024

ALJ Signature:

Linda Brite

Linda Brite Presiding Administrative Law Judge



#### **TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

# AN ORDER GRANTING THE APPLICATION BY UNDINE TEXAS ENVIRONMENTAL, LLC FOR NEW TPDES PERMIT NO. WQ0016046001; SOAH DOCKET NO. 582-23-20937 TCEQ DOCKET NO. 2023-0163-MWD

On \_\_\_\_\_\_, the Texas Commission on Environmental Quality (TCEQ or Commission) considered the application of Undine Texas Environmental, LLC (Applicant) for a new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016046001. A Proposal for Decision (PFD) was presented by Linda Brite, Administrative Law Judge (ALJ) of the State Office of Administrative Hearings (SOAH), who conducted an evidentiary hearing concerning the application on November 15, 2023, in Austin, Texas. After considering the PFD, the Commission makes the following findings of fact and conclusions of law.

#### I. FINDINGS OF FACT

#### **Application**

- 1. Applicant filed its application (Application) for a TPDES permit with the Commission on September 24, 2021.
- 2. The Application requested authorization to discharge treated domestic wastewater from a wastewater treatment facility (Facility), that will be located approximately 2,900 feet southwest of the intersection of County Road 220 and Old Angleton Road in Brazoria County, Texas.
- 3. The proposed discharge route is first to Angleton Drainage District Ditch (Ditch) 7, thence to Ditch 22, thence to Bastrop Bayou Tidal in Segment No. 1105 of the San Jacinto-Brazos Coastal Basin.
- 4. The Application requested authorization to discharge treated domestic wastewater at a daily average flow not to exceed 0.0625 million gallons per day (MGD) in the Interim I phase, 0.125 MGD in the Interim II phase, and a daily average flow not to exceed 0.250 MGD in the Final phase.
- 5. The Executive Director (ED) of the Commission completed the technical review of the Application, prepared a draft permit (Draft Permit), and made it available for public review and comment.

# The Draft Permit

- 6. The Facility will be an activated sludge process plant operated in the complete mix mode. The Draft Permit provides for three phases, the Interim I phase, the Interim II phase, and the Final phase. Treatment units in the Interim I phase will include a bar screen, one aeration basin, one final clarifier, one slug digester, and one chlorine contact chamber. Treatment units in the Interim II phase will include a bar screen, two aeration basins, one final clarifier, two sludge digesters, and one chlorine contact chamber. Treatment units in the Final phase will include a bar screen, four aeration basins, one final clarifier, two sludge digesters, and one chlorine contact chamber. Treatment units in the Final phase will include a bar screen, four aeration basins, one final clarifier, four sludge digesters, and one chlorine contact chamber.
- 7. During the Interim I phase, the Facility may not discharge more than 0.0625 MGD. The Interim II phase discharge may not exceed 0.125 MGD, and, in the final phase, the Facility would be authorized to discharge up to 0.250 MGD.
- 8. The Draft Permit contains the following effluent limits for all phases:

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Effluent Characteristic	Discharge Limitations
5-day Biochemical Oxygen Demand	10 milligrams (mg) / liter (L)
Total Suspended Solids	15 mg/L
Ammonia Nitrogen	3 mg/L
Phosphorus	1.0 mg/L
E. coli	126 colony forming units or
	most probable number
Dissolved Oxygen	4.0 mg/L
Effluent pH	Not less than 6.0, not more than
	9.0
Chlorine residual	At least 1.0 mg/L, not more than
	4.0 mg/L

#### **Notice and Jurisdiction**

- 9. The Notice of Receipt of Application and Intent to Obtain TPDES Permit was published in *The Facts* on January 29-30, 2021.
- 10. The Notice of Application and Preliminary Decision was published in *The Facts* on March 24, 2022.
- 11. The Notice of Public Meeting was published in *The Facts* on June 21, 2022.
- 12. A public meeting was held in Angleton, Texas on July 28, 2022, and the public comment period ended at the close of the public meeting.
- 13. On November 8, 2022, the ED filed the Response to Comments.
- 14. The ED's Final Decision letter was mailed on November 16, 2022.
- 15. On April 5, 2023, the Commission issued an Interim Order referring the following issues to SOAH for a contested case hearing:

Issue A: Whether the draft permit will be protective of surface water quality and preserve the designated uses of the discharge route in accordance with the Texas Surface Water Quality Standards and be protective of groundwater in the area;

Issue B: Whether the draft permit is protective of human health of residents in the immediate vicinity of the proposed facility and the immediate discharge route; and

Issue C: Whether the draft permit is protective of aquatic life, wildlife, and livestock in the immediate vicinity of the proposed facility and discharge route.

16. The notice of the preliminary hearing was published in *The Facts* on July 6, 2023. 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**

- 17. On August 21, 2023, SOAH ALJ Holly Vandrovec convened a preliminary hearing in this case via videoconference. Applicant, the ED, TCEQ's Office of Public Interest Council (OPIC), Brazoria County (County), and Ronnie Gene Autry appeared and were named parties.
- 18. The Administrative Record was admitted into the record as Applicant Exhibit A (Tab A through D) and Exhibit B (Tab E).
- 19. On November 15, 2023, SOAH ALJ Linda Brite convened as a hybrid (in-person/videoconference) hearing at the SOAH offices at 300 West 15th Street, 4th Floor, Austin, Texas 78701. Applicant was represented by attorney Peter Gregg. The ED was represented by attorney Kathy Humphreys. OPIC was represented by attorney Jennifer Jamison. The County was represented by attorneys Stefanie Albright and Emily Rogers. Mr. Autry was represented by attorney Matt Edquist.
- 20. The record closed on December 12, 2023, upon submission of written closing briefs.

# The Texas Surface Water Quality Standards

- 21. The TSWQS designate uses for the state's surface waters and establish narrative and numerical water quality standards to protect those uses.
- 22. TCEQ has adopted standard procedures to implement the TSWQS, which are approved by the U.S. Environmental Protection Agency (EPA) and set forth in the Procedures to Implement the Texas Surface Water Quality Standards (IPs).
- 23. The TSWQS and IPs are used to set permit limits for wastewater discharges.
- 24. Nutrients in streams and rivers are evaluated based on the general narrative criteria for nutrients and the antidegradation rules.
- 25. Nutrients must not cause excessive growth of aquatic vegetation that impairs uses of the waterbody.
- 26. Under a Tier 1 antidegradation review, existing uses and water quality sufficient to protect those uses must be maintained. 30 Tex. Admin. Code § 307.5(b)(1).

# Protection of Water Quality, Aquatic Life, Wildlife, and Livestock

- 27. The receiving ditches, Ditch Nos. 7 and 22, are characterized as intermittent with pools and having limited aquatic life use.
- 28. TCEQ utilized proper default hydraulic assumptions in its water quality modeling analysis, absent any site-specific data.
- 29. The Tier 1 antidegradation review determined that existing water quality uses would not be impaired.
- 30. A Tier 2 antidegradation review determined that no significant degradation of water quality is expected in Ditch 22's tidal reach and Bastrop Bayou Tidal, which have been identified as having high aquatic uses.

- 31. The Draft Permit's proposed permit limits are in accordance with TCEQ standard operating procedures and are sufficiently protective of water quality and uses of the waters in the state.
- 32. The County and Mr. Autry (collectively, Protestants) did not present evidence that the Draft Permit violates a specifically applicable state or federal requirement.

## Protection of Groundwater and Human Health

- 33. Mr. Autry has two groundwater wells approximately a half-mile from the proposed discharge and approximately 150 feet from Ditch 7.
- 34. TCEQ did not conduct an assessment relating to the impact of the proposed discharge on groundwater.
- 35. A TPDES permit drafted to be protective of surface receiving waters will be protective of groundwater in the vicinity.

#### **Transcription Costs**

- 36. No evidence about transcription costs was presented.
- 37. Applicant and the County participated in the hearing and benefitted equally from having a copy of transcript, whereas Mr. Autry participated in the hearing to a very limited extent.
- 38. As a for-profit company, Applicant has the ability to pay.
- 39. Applicant seeks issuance of the permit, whereas the Protestants seek to preserve the status quo.
- **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 section 2003.047.

- 3. Notice was provided in accordance with Texas Water Code sections 5.114 and 26.028; Texas Government Code sections 2001.051 and 2001.052; and 30 Texas Administrative Code sections 39.405 and 39.551.
- 4. The Application is subject to the requirements in Senate Bill 709, effective September 1, 2015. Tex. Gov't Code § 2003.047(i-1)-(i-3).
- 5. Applicant's filing of the Administrative Record established a prima facie case 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. Protestants did not rebut the prima facie demonstration by demonstrating that one or more provisions in the Draft Permit violate a specifically applicable state or federal requirement that relates to a matter referred by TCEQ. Tex. Gov't Code § 2003.047(i-2); 30 Tex. Admin. Code § 80.17(c).
- 8. The Draft Permit is protective of water quality and the existing uses of the receiving waters in accordance with applicable TSWQS.
- 9. TCEQ's analysis was performed in accordance with TCEQ standard operating procedures and IPs.
- 10. The Draft Permit complies with the location standards of 30 Texas Administrative Code sections 290.41(c) and 309.13.
- 11. The Draft Permit is protective of groundwater in the area.
- 12. The Draft Permit is protective of human health of residents in the immediate vicinity of the Facility and the immediate discharge route.
- 13. The Draft Permit is protective of aquatic life, wildlife, and livestock in the immediate vicinity of the Facility and discharge route.

- 14. The Application should be granted, and the Draft Permit issued.
- 15. 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).
- No transcript costs may be assessed against the ED or OPIC because TCEQ's rules prohibit the assessment of any cost to a statutory party who is precluded by law from appealing any ruling, decision, or other act of the Commission. 30 Tex. Admin. Code § 80.23(d)(2).
- 17. All transcript costs should be allocated to Applicant.

# 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. WQ0016046001 is granted as set forth in the Draft Permit.
- 2. All transcript costs are allocated to Applicant.
- 3. 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.
- 4. The effective date of this Order is the date the Order is final, as provided by Texas Government Code section 2001.144 and 30 Texas Administrative Code section 80.273.
- 5. TCEQ's Chief Clerk shall forward a copy of this Order to all parties.
- 6. 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

Jon Niermann, Chairman, For the Commission