

State Office of Administrative Hearings

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August 15, 2025

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VIA EFILE TEXAS
AND REGULAR MAIL

RE: Docket Number 582-24-14115; TCEQ No. 2023-0574-IWD; *In the Matter of the Application by Lyondell Chemical Company for a Major Amendment with Renewal of TPDES Permit No. WQ000292700*

Dear Parties:

Please find attached a Proposal for Decision in this case.

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

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

CC: Service List

BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

APPLICATION BY LYONDELL CHEMICAL COMPANY FOR MAJOR AMENDMENT WITH RENEWAL TO TPDES PERMIT NO. WQ0002927000

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BEFORE THE
STATE OFFICE OF ADMINISTRATIVE
HEARINGS

**APPLICATION BY LYONDELL CHEMICAL COMPANY FOR
MAJOR AMENDMENT WITH RENEWAL TO
TPDES PERMIT NO. WQ0002927000**

PROPOSAL FOR DECISION

Lyondell Chemical Company (Lyondell or Applicant) filed an application (Application) with the Texas Commission on Environmental Quality (TCEQ or Commission) for a renewal and a major amendment to Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ002927000 regarding its existing facility located in Channelview, 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 be finalized and issued without changes.

I. NOTICE, JURISDICTION, AND PROCEDURAL HISTORY

No party contested jurisdiction or notice. The ALJ will address jurisdiction and notice in the findings of fact and conclusions of law in the Proposed Order attached to this Proposal for Decision (PFD).

Lyondell filed the Application on January 5, 2021, and the ED declared it administratively complete on February 5, 2021. The ED completed the technical review of the Application on September 28, 2021. Douglas R. Stewart opposed the Application. The Commission determined that Mr. Stewart qualified as an affected person, granted his hearing request, and referred the matter to SOAH for a hearing. At the preliminary hearing on June 5, 2024, the administrative record and jurisdictional documents were admitted into evidence.¹ The ALJ also granted Lyondell's motion to abate the proceeding, awaiting potential consolidation with the pending application of a sister subsidiary.² The matter resumed as a consolidated case under this docket number in December 2024.

On June 5, 2025, ALJ Megan Johnson convened a hearing on the merits via Zoom videoconference. Attorneys Whit Swift and Sara Burgin represented Lyondell. Attorney Harrison Malley represented the ED. Attorney Thomas Mercer

¹ The administrative record consists of Tabs A-F (Admin. Record).

² This matter was consolidated with SOAH Docket No. 582-25-03099 on December 19, 2024. That docket was severed and remanded to TCEQ on April 30, 2025.

represented the Office of Public Insurance Counsel (OPIC). Mr. Stewart represented himself. The record closed after submission of closing briefs on June 27, 2025.³

II. APPLICABLE LAW

A. BURDEN OF PROOF AND PRIMA FACIE CASE

Applicant, as the moving party, bears the burden of proof by a preponderance of the evidence.⁴ TCEQ referred it to SOAH under Texas Water Code section 5.556, which governs referral of environmental permitting cases to SOAH.⁵ Therefore, this case is subject to Texas Government Code section 2003.047(i-1)-(i-3), which provides:

(i-1) In a contested case regarding a permit application referred under Section 5.556 [of the] Water Code, the filing with [SOAH] of the application, the draft permit prepared by the [ED] of the [C]ommission, the preliminary decision issued by the [ED], 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

³ Mr. Stewart filed a responsive closing argument on July 18, 2025. Because this was filed after the record closed, it was not considered by the ALJ.

⁴ 1 Tex. Admin. Code § 155.427; 30 Tex. Admin. Code § 80.17(a). TCEQ rules, found in Title 30, part 1, chapters 1 to 352 of the Texas Administrative Code, are referred to herein as “Rule ____.”

⁵ Tex. Water Code §§ 5.551(a), .556.

- (2) a permit, if issued consistent with the draft permit, would protect human health and safety, the environment, and physical property.
- (i-2) A party may rebut a demonstration under Subsection (i-1) by presenting evidence that:
 - (1) relates to . . . an issue included in a list 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 [ED] may present additional evidence to support the draft permit.⁶

Neither the statute nor TCEQ rules elaborate as to the burden that must be met for the evidence to “demonstrate that one or more provisions in the draft permit violate a specifically applicable state or federal requirement.” The ordinary meaning of “demonstrate” is “[t]o show to be true by reasoning or adducing evidence; prove.”⁷ In contested case hearings, like civil trials, the longstanding general or default rule is that facts are deemed proven to exist or to be true by a preponderance

⁶ Tex. Gov’t Code § 2003.047(i-1)-(i-3).

⁷ *Demonstrate*, The American Heritage Dictionary of the English Language (5th ed. 2022).

of the evidence.⁸ As applied in the context of the Senate Bill (S.B.) 709 framework, an opposing party's burden under Texas Government Code section 2003.047(i-2) would be to present evidence that would, as compared to the contents of the administrative record filed with SOAH and admitted into evidence, preponderate in favor of a finding or conclusion that "one or more provisions in the draft permit violate a specifically applicable state or federal requirement," thereby rebutting material facts that would otherwise be deemed proven by the mere filing and admission of the administrative record.⁹

The applicant and the ED have the right to "present additional evidence to support the draft permit" to augment or elaborate upon the administrative record. The burden of proof on the ultimate merits of the issue remains with the applicant. In this respect, an opposing party's burden under section 2003.047(i-2) is similar to one of production rather than proof in the sense of ultimate persuasion. The ALJ notes that neither the statute nor TCEQ rules require the applicant to rely solely on the administrative record unless and until it is rebutted. Rather, the applicant may present any additional evidence to support the permit once the administrative record

⁸ See *Granek v. Tex. State Bd. of Med. Exam'rs*, 172 S.W.3d 761, 777 (Tex. App.—Austin 2005, no pet.).

⁹ Accord 40 Tex. Reg. 9688 (Dec. 25, 2015) (explaining, in regard to TCEQ rules implementing S.B. 709 that, while the burden of proof remains with the applicant, that burden can be met "by the submittal of the administrative record to and its admittance into the evidentiary record by SOAH, subject to rebuttal as provided in new Texas Government Code § 2003.047(i-2). In addition, SB 709 does not establish the evidentiary standard for any party in a [contested case hearing], nor does it provide any direction to SOAH or the commission to establish a new standard for the rebuttal demonstration in new Texas Government Code § 2003.047(i-2). Because [contested case hearings] are similar to non-jury civil trials in district court, the evidentiary standard in [contested case hearings] for permit applications is 'preponderance of the evidence.'").

is admitted.¹⁰ To the extent an applicant does so, the S.B. 709 analysis, as a practical matter, could reduce simply to weighing the totality of competing evidence presented by both sides, as contemplated by section 2003.047(i-3), and determining whether the applicant carried its burden of proof on each contested issue.

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. 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 the permit, if issued consistently with the Draft Permit, would protect human health and safety, the environment, and physical property.¹¹ Applicant presented evidence beyond the administrative record. Accordingly, the ALJ focused the analysis on whether Applicant met its burden of proof based on the totality of evidence ultimately presented.

B. WASTEWATER DISCHARGE PERMIT REQUIREMENTS

Chapter 26 of the Texas Water Code requires a person who seeks to discharge wastewater into water in the state to file an application with TCEQ pursuant to filing requirements in 30 Texas Administrative Code, chapter 305, subchapter C.¹² TCEQ

¹⁰ Rule 80.117(c)(2) (the applicant, protesting parties, OPIC, and the ED may present evidence after admittance of the administrative record by the ALJ); *see also* Rule 80.117(b) (the applicant's presentation of evidence to meet its burden of proof may consist solely of the filing with SOAH, and admittance by the ALJ, of the administrative record).

¹¹ Rule 80.17(a), (c); 1 Tex. Admin. Code § 155.427.

¹² Tex. Water Code § 26.027(b).

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 United States 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 adopted 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.

TCEQ has adopted water quality standards applicable to wastewater discharges in accordance with section 303 of the federal 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, 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 them as the

Implementation Procedures (IPs), which are approved by the EPA.¹³ The TSWQS and IPs are used in reviewing permit applications.

C. THE DRAFT PERMIT

Lyondell owns and operates the existing wastewater treatment facility, located at 2502 Sheldon Road, in Channelview, Texas, on the south side of the Channelview Complex (Facility).¹⁴ The Facility operates under TPDES Permit No. WQ0002927000, which authorizes the discharge of wastewater, stormwater, utility water, and other streams from the Facility from several authorized outfalls.¹⁵ More specifically, effluent from the Facility is discharged via Outfalls 001-006 and 008 to Harris County Flood Control District (HCFCD) ditch G103-02-03 (HCFCD Ditch); via Outfall 009 to an unnamed ditch, then to Bear Bayou Lake, which is considered part of the San Jacinto River Tidal; via Outfall 010 to a Wallisville roadside ditch; and then all to San Jacinto River Tidal in Segment No. 1001 of the San Jacinto River Basin. The unclassified receiving waters—the HCFCD Ditch, the unnamed ditch, and the Wallisville roadside ditch—have minimal aquatic life use. The designated uses for Segment No. 1001 are primary contact recreation and high aquatic life use (ALU).

¹³ 30 Tex. Admin. Code § 307.2(e).

¹⁴ App. Ex. 100 at 4.

¹⁵ App. Ex. 100 at 4.

Lyondell seeks to amend its existing permit to:

- use a site-specific hardness for calculating water quality-based effluent limits to authorize increased copper limits at Outfall 001;
- remove limits and monitoring requirements for total aluminum, total zinc, and total xylenes at Outfall 001;
- add wastestreams to Outfalls 001, 002, and 008;¹⁶
- modify various wastewater descriptions;
- increase the daily maximum pH limit at Outfall 002;
- reduce the monitoring frequency at Outfalls 002 and 003 for total organic carbon and oil and grease;
- use site-specific partitioning coefficients for aluminum at Outfalls 004, 004, and 005 for calculating water quality-based effluent limits;
- update the discharge and monitoring locations for Outfalls 008, 009 and 010;
- revise the discharge route description for Outfall 009;
- remove Other Requirements Nos. 5, 12 and 14; and
- update Other Requirement No. 4.¹⁷

The Application does not request an increase in any wastewater discharge rate already authorized under the exiting permit.¹⁸ Following its technical review and completion of the public comment period, the ED concluded that:

¹⁶ These amendments would authorize additional discharges, including water treatment wastes, utility wastewater, construction stormwater, landfarm runoff, supernate (from wastewater treatment solids), and boiler blowdown (including maintenance wasterwaters). *See* Admin. Record Tab F (Application).

¹⁷ Admin. Record Tab F (Application).

¹⁸ ED Ex. JL-1 (Lueg Dir.) at 8; ED Ex. MB-1 (Baez Dir.) at 12; App. Ex. 100 (Warnement Dir.) at 6.

- the Draft Permit does not include an increase in flow;¹⁹
- its evaluation of the critical conditions of the receiving water took into account the discharge flow, the receiving water body, and the dimensions of the receiving water;²⁰
- the Applicant's use of site-specific hardness in support of the increase in the permitted copper limit was appropriate for the freshwater HCFCD Ditch;²¹
- the ED did not consider the delta referenced in the Protestant's comments to be related to suspended solids discharged by the Applicant;²² and
- the Applicant's facility will not negatively impact receiving water uses or pose an adverse risk to human health or the environment if operated in accordance with the approved permit conditions and regulatory requirements.²³

III. DISCUSSION

Mr. Stewart protests the Draft Permit on three grounds: (1) that a large volume of white material is entering Bear Bayou Lake from the HCFCD Ditch; (2) that the amendment regarding an increase in the allowable copper limit was not based on representative data or evaluated with the correct methodology; and (3) that the discharge from the Facility is causing erosion of the Lyondell discharge channel and the HCFCD Ditch and sediment buildup in Bear Bayou Lake.²⁴

¹⁹ ED Ex. MB-3 (Response to Comments) at 7.

²⁰ ED Ex. MB-3 (Response to Comments) at 7.

²¹ ED Ex. MB-3 (Response to Comments) at 8-9.

²² ED Ex. MB-3 (Response to Comments) at 11.

²³ ED Ex. MB-3 (Response to Comments) at 12.

²⁴ Protestant (Prot.) Ex. 7. Mr. Stewart owns property on Bear Bayou Lake.

The Commission referred the Application to SOAH for a contested case hearing on two issues:

- A) Whether the Draft Permit complies with applicable antidegradation requirements; and
- B) Whether the Draft Permit is protective of water quality, including the protection of human health, existing uses of the receiving waters, and use and enjoyment of requester's properties, in accordance with applicable regulations including the TSWQS in 30 Texas Administrative Code, Chapter 307.²⁵

A contested case hearing referred to SOAH under Texas Water Code section 5.556 is limited to those issues referred to SOAH by the Commission.²⁶

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.²⁷

At the hearing on the merits, Protestant had twelve exhibits admitted, which included his own prefiled testimony;²⁸ Lyondell had seven exhibits admitted, which

²⁵ Admin. Record, Tab A.

²⁶ Tex. Gov't Code § 2003.047(e)-(f); 30 Tex. Admin. Code § 55.211(c).

²⁷ Tex. Gov't Code § 2003.047(i-1).

²⁸ Protestant Exhibits 1-3, 4A, 4B, 5A, 5B, 5C, 5C, 6-8. Mr. Stewart is an engineer and has a company that provides stormwater services. Transcript (Tr.) at 85. However, he did not present himself as an expert on wastewater permitting, the TSWQS, or antidegradation.

included the prefiled testimony of Tom Warnement, Lial Tischler, and Douglas Durbin;²⁹ and the ED had eight exhibits admitted, which included the prefiled testimony of Jenna Lueg and Monica Vallin-Baez.³⁰ OPIC offered no testimony or exhibits.

A. ANTIDegradation (REFERRED ISSUE A)

The TSWQS require that proposed wastewater discharges undergo an antidegradation review.³¹ TCEQ's antidegradation rule at 30 Texas Administrative Code section 307.5 establishes a multitiered policy to ensure that existing water quality uses, including ALUs, are maintained and not impaired by increases in waste loading.³² The first tier (Tier 1) requires that existing instream water uses—and water quality sufficient to protect the existing uses—be maintained.³³ Tier 1 applies to all sources of pollution that could cause an impairment of water quality, including all authorized wastewater discharges.³⁴

The second tier (Tier 2) requires that authorized discharges not cause degradation of waters that exceed fishable and swimmable quality, unless it can be shown that the lowering of water quality is necessary for important economic and

²⁹ Lyondell Exhibits 100, 200-203, 300-301.

³⁰ ED Exhibits JL-1 through JL-4 and MB-1 through MB-4.

³¹ 30 Tex. Admin. Code § 307.5. Antidegradation implementation procedures for TPDES permits are described in the IPs. 30 Tex. Admin. Code § 307.5(c)(1); ED Ex. JP-3 at 71-85.

³² 30 Tex. Admin. Code § 307.5; *see also* Tex. Water Code § 26.003.

³³ 30 Tex. Admin. Code § 307.5(b)(1).

³⁴ 30 Tex. Admin. Code § 307.5; City Ex. BW-1 (Whitaker Dir.) at 17.

social development.³⁵ “Degradation” for purposes of Tier 2 is defined as “a lowering of water quality by more than a de minimis extent, but not to the extent that an existing use is impaired.”³⁶ “Fishable or swimmable waters” are defined as “waters that have quality sufficient to support propagation of indigenous fish, shellfish, terrestrial life, and recreation in and on the water.”³⁷ Because the San Jacinto River Tidal is within three miles of the discharge route, it is designated to have high ALU and a Tier 2 review was required.³⁸

The ED performed an antidegradation review of the receiving waters.³⁹ The Tier 1 antidegradation review determined that existing water quality uses will not be impaired by the Draft Permit and that criteria to protect existing uses will be maintained.⁴⁰ The Tier 2 review concluded that no significant degradation of water quality is expected in San Jacinto River Tidal, the receiving water designated as having a high aquatic life use.⁴¹ In sum, the ED’s review concluded that existing uses of the receiving waters will be maintained and protected.

³⁵ 30 Tex. Admin. Code § 307.5(b)(2).

³⁶ 30 Tex. Admin. Code § 307.5(b)(2). The term “de minimis” is not defined.

³⁷ 30 Tex. Admin. Code § 307.5(b)(2).

³⁸ ED Ex. JL-1 (Lueg Dir.) at 6, 10-11.

³⁹ This review was conducted pursuant to 30 Texas Administrative Code section 307.5 and TCEQ’s *Procedures to Implement the Texas Surface Water Quality Standards*.

⁴⁰ ED Ex. JL-1 (Lueg Dir.) at 6.

⁴¹ ED Ex. JL-1 (Lueg Dir.) at 6.

1. Protestant's Evidence and Position

As an initial matter, Mr. Stewart did not offer any evidence regarding existing water quality uses and how those uses would be impaired by the Draft Permit. He did, however, provide evidence potentially relating to water quality. First, Protestant testified about the existence of an unknown white foam substance that appears to be coming from a corrugated metal pipe that enters the outfall ditch at Outfall 001, and he submitted various photographs depicting the white substance near the Facility.⁴²

Second, Mr. Stewart testified that an increase in the Draft Permit's allowed copper limit is concerning because of its negative effects on the various wildlife that live in the waters of Bear Bayou Lake and the San Jacinto river.⁴³ He testified that no samples from the point of discharge were taken to determine water hardness; that samples were taken from waters as far as five miles away; and that too few samples were taken to ensure a normal distribution. Mr. Stewart argues that the Texas Water Code section 26.121 requires discharge be reported at the point where it enters state waters—here, the San Jacinto River.⁴⁴

Finally, Mr. Stewart argues that the amendments seek to increase the daily effluent discharge allowed. He explains that the increased flows over the years have exceeded the capacity of the HCFCD Ditch, causing the discharge to flow directly into the waters of Bear Bayou Lake and the San Jacinto River. Moreover, eroded soil

⁴² Prot. Exs. 1-6B.

⁴³ Prot. Ex. 7.

⁴⁴ Prot. Ex. 7.

now extends into the receiving waters and, he maintains, it will eventually fill the channel of Bear Bayou Lake.⁴⁵

2. ED's Evidence and Position

The ED maintains that the Draft Permit complies with TCEQ antidegradation policy pursuant to 30 Texas Administrative Code section 307.5. Ms. Lueg, an Aquatic Scientist at TCEQ in the Water Quality Assessment Section who performed the antidegradation review on the Application, testified regarding how she performed the review, what she reviewed, and the rules and guidelines she applied (including the IPs).⁴⁶ She testified that her Tier 1 and Tier 2 reviews were done consistent with TCEQ rules.

Regarding Mr. Stewart's grounds for protest, Ms. Lueg also testified that she did not consider the white substance as part of her assessment because the antidegradation review is based on the application materials (including attached photographs).⁴⁷ Moreover, she stated that the water sampling method Mr. Stewart describes is incorrect according to the IPs.⁴⁸

⁴⁵ Prot. Exs. 4-6.

⁴⁶ ED Ex. JL-1 (Lueg Dir.) at 4-6.

⁴⁷ ED Ex. JL-1 (Lueg Dir.) at 8.

⁴⁸ ED Ex. JL-1 (Lueg Dir.) at 8.

She also explained that a hardness assessment (relating to copper limits) was not part of her review.⁴⁹ The hardness values for segments are given in the IPs, derived from the Surface Water Quality Information Systems database.⁵⁰ Based on a site-specific hardness study, the hardness value for the freshwater drainage ditches here was approved by permit writer Yvonne Miramontes in 2001.⁵¹

Relating to Mr. Stewart's third ground, Ms. Lueg explained that Lyondell is not asking for a permit to increase the daily effluent discharge and, regardless, this factor is not part of her antidegradation review.⁵² She also testified that the TCEQ's permitting process is limited to controlling the discharge of pollutants into the water and protecting water quality; it does not consider erosion.⁵³

3. Applicant's Position

Applicant argues that Mr. Stewart's disputed items and the supporting evidence do not address the ED's antidegradation review. Given the absence of controverting evidence, Lyondell maintains, the Administrative Record establishes its prima facie demonstration related to 30 Texas Administrative Code section 307.5. Lyondell also cites Ms. Lueg's testimony in support of the fact that the ED's antidegradation review satisfied Lyondell's burden of proof.

⁴⁹ ED Ex. JL-1 (Lueg Dir.) at 8.

⁵⁰ ED. Ex. JL-1 (Lueg Dir.) at 8.

⁵¹ ED Ex. JL-1 (Lueg Dir.) at 8.

⁵² ED Ex. JL-1 (Lueg Dir.) at 8.

⁵³ ED Ex. JL-1 (Lueg Dir.) at 8-9.

4. OPIC's Position

OPIC concluded that Mr. Stewart failed to present convincing evidence that the Draft Permit did not comply with TCEQ's antidegradation policies.

5. ALJ Analysis

The ALJ finds that the preponderance of the credible evidence shows that the Draft Permit complies with TCEQ's antidegradation policy, which generally requires that existing uses, and water quality sufficient to protect those uses, must not be degraded.

As an initial matter, Mr. Stewart failed to put forth any evidence challenging the ED's antidegradation review. Moreover, Mr. Stewart presented no evidence challenging either the ED's classification of the existing uses of the receiving waters or whether the Draft Permit will affect the water quality such that it is no longer sufficient to protect those existing uses. Mr. Stewart's evidence focused on water quality and erosion, which are discussed in more detail in relation to Issue B below.

The ED presented credible evidence that Ms. Lueg performed the Tier 1 and Tier 2 antidegradation reviews in accordance with the IPs and TCEQ rules. Ms. Lueg determined that no significant degradation of water quality is expected and that the existing uses will be maintained and protected. Lyondell's expert concurred with Ms. Lueg's analysis.

The ALJ concludes that Mr. Stewart failed to rebut the prima facie demonstration and, Lyondell has met its burden to prove, by a preponderance of the evidence, that the Draft Permit complies with applicable antidegradation requirements and adequately protects existing uses.

B. WATER QUALITY (REFERRED ISSUE B)

The federal Clean Water Act requires states to adopt a continuing planning process that includes a plan for implementing the state's water quality standards.⁵⁴ At TCEQ, this process resulted in the IPs, which had to receive Commission and EPA approval before they were implemented.⁵⁵ The IPs state that the surface waters will not be toxic to human, terrestrial, or aquatic life.⁵⁶ The IPs delineate a methodology to ensure compliance with 30 Texas Administrative Code chapter 307.⁵⁷

1. Protestant's Evidence and Position

As outlined above, Mr. Stewart proffers three grounds for protesting the Draft Permit.

⁵⁴ 33 U.S.C. § 1313(e)(1), (3)(F).

⁵⁵ 30 Tex. Admin. Code § 307.2(e).

⁵⁶ ED Ex. MB-1 at 10.

⁵⁷ ED Ex. MB-1 at 10-11.

a) Discharge of White Material

Mr. Stewart argues that Lyondell has no permit for the large quantities of white material being discharged from Outfall 001.⁵⁸ He questions whether the discharge could be related to the train yard and pumps that are located adjacent to Outfall 001.⁵⁹

Mr. Stewart provided an aerial photograph of the Facility from 2006 that shows a white substance on the surface of most of the depicted water.⁶⁰ He testified that this type of discharge happens several times a year, including three times in the last six months.⁶¹ He also provided time-lapsed photographs (dated December 2023) of Bear Bayou Lake showing an increased progression of lighter-colored water off the shore of his property.⁶² Finally, Mr. Stewart provided two pictures of the area surrounding Outfall 001 with a white substance present.⁶³ Mr. Stewart testified that this water is white because of the velocity of the flow that it coming out of Outfall 001, which then tumbles onto the rocks below.⁶⁴

⁵⁸ Prot. Exs. 1, 2, 3, 7 at 1.

⁵⁹ Prot. Exs. 1, 7.

⁶⁰ Prot. Ex. 1.

⁶¹ Prot. Ex. 8 at 2; Tr. at 96.

⁶² Prot. Exs. 2, 8.

⁶³ Prot. Exs. 3, 8.

⁶⁴ Tr. at 101-102.

Mr. Stewart testified that although this white substance does not likely come from Lyondell's production, it "can be introduced into the system from some source."⁶⁵ He said that he has "thoughts about where it might come from, but [he] has no evidence to support [it]."⁶⁶ Mr. Stewart went on to testify about a pump located near the Facility that may be pumping a substance into the ditch other than the Facility's discharge and may be causing the white substance to appear.⁶⁷ He questions whether someone is cleaning nearby railcars and pumping it into Outfall 001.⁶⁸

b) Increased Copper Discharge Limit

Mr. Stewart disputes the testing methodology, specifically, the sampling of the receiving waters, TCEQ used for copper. The "T" test was used, and Mr. Stewart argues this test is not adequate because: (1) it is used when analyzing small samples of unknown variance; (2) the sampling points were an approximate area of a six-mile radius; (3) samples were taken from bayous and roadside ditches not connected to the receiving waters and samples from Outfall 1 were not identified or located identically upstream; (4) the samples taken upstream of the receiving waters were "possibly" taken from an old study; and (5) it is not "known or reported" that any of the samples came from a normally distributed population.⁶⁹

⁶⁵ Tr. at 92-92.

⁶⁶ Tr. at 92.

⁶⁷ Tr. at 108-109; *see also* Prot. Ex. 5.

⁶⁸ Tr. at 110.

⁶⁹ Prot. Closing Brief at 1-2.

c) Increased Permitted Discharge, Erosion, and Sediment

Mr. Stewart argued that the HCFCD Ditch and Outfall 001 Ditch are not designed to accommodate the amount of production water, pumped water, and stormwater runoff coming from the developed site. He maintained that the water flow has broken out of the HCFCD Ditch and travels directly to the receiving waters of Bear Bayou Lake and then to the San Jacinto River.⁷⁰ Therefore, he contends, design attributes of the HCFCD Ditch are no longer available to control water flow, which causes large amounts of erosion to form a delta at the current point of discharge.⁷¹ Mr. Stewart testified that the delta has extended out into the bayou almost 2,000 feet.⁷² The water has also cut a path to the San Jacinto River other than the HCFCD Ditch due to increased volume.⁷³ This, Mr. Stewart argues, invalidates the conditions of Lyondell's existing permit and changes the required sampling locations from Outfall 001 to Bear Bayou Lake and the San Jacinto River.⁷⁴

Mr. Stewart also questioned Dr. Durbin's⁷⁵ understanding of how stormwater is controlled through flood control ditches—that “massive floods” creating erosion do not happen from a 1-5 year storm, which is all the HCFCD Ditch is designed to contain and regulate. Mr. Stewart testified that the delta was formed by high velocity

⁷⁰ Prot. Closing Brief at 3.

⁷¹ Prot. Closing Brief at 3.

⁷² Tr. at 92.

⁷³ Tr. at 93.

⁷⁴ Prot. Closing Brief at 4; *see also* Tex. Water Code § 26.121.

⁷⁵ Dr. Douglas Durbin is an environmental scientist and Lyondell's expert relating to Mr. Stewart's concerns about sedimentation in Bear Bayou Lake.

flow, not sedimentation, which is due to slow velocity followed by particle settlement.⁷⁶

2. ED's Evidence and Position

Monica Vallin-Baez, an Environmental Permit Specialist on the Industrial Permits team at TCEQ, is a permit writer and performs technical evaluations of TPDES permits, including water quality.⁷⁷ Although this permit was originally drafted by a colleague, Dr. Baez made necessary revisions based on EPA suggestions.

Dr. Baez explained that the technical review of an application begins with the Water Quality Assessment Section, which determines the designated uses of the water body that would receive the proposed discharge, the critical conditions for the water body, the limitations necessary to ensure that the dissolved oxygen criteria for the water body is maintained, and the whole effluent toxicity testing requirements.⁷⁸ The permit writer then develops water quality-based effluent limitations based on federal effluent guidelines.⁷⁹ Dr. Baez testified that, to the best of her knowledge, the original permit writer adhered to these technical review and permit drafting practices.

⁷⁶ Tr. at 103.

⁷⁷ ED Ex. MB-1 (Baez Dir.) at 3.

⁷⁸ ED Ex. MB-1 (Baez Dir.) at 5.

⁷⁹ ED Ex. MB-1 (Baez Dir.) at 5.

Dr. Baez also testified that, based upon her review of the Draft Permit, including the IPs and other relevant materials, all applicable rules and guidelines were adhered to when the permit was drafted.⁸⁰ She opined that the Draft Permit contains technology-based effluent limitations reflecting the best controls available and, where these do not adequately protect water quality, effluent limitations or conditions are included in the Draft Permit.⁸¹ Moreover, the Draft Permit specifically states that “[t]here shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.”⁸²

Dr. Baez also explained that she considered the copper limits of the Draft Permit and found that they are protective of aquatic and wildlife because the limitations were calculated specifically for the HCFC Ditch and the San Jacinto River Tidal to be protective of aquatic life and human health.⁸³ In other words, the copper discharge limit that applies to Outfall 001 in the Draft Permit is based on a site-specific study of the water hardness of the receiving water—the HCFC Ditch. Additionally, the Draft Permit has whole effluent toxicity testing requirements (biomonitoring), which is the most direct measure of potential toxicity.⁸⁴

⁸⁰ ED Ex. MB-1 (Baez Dir.) at 7.

⁸¹ ED Ex. MB-1 (Baez Dir.) at 10.

⁸² Admin. Record Tab C at 2b.

⁸³ ED Ex. MB-1 (Baez Dir.) at 11-12.

⁸⁴ ED Ex. MB-1 (Baez Dir.) at 12.

Finally, Dr. Baez testified that Lyondell is not requesting an increase in flow and that it is not within TCEQ's jurisdiction to consider erosion as part of the wastewater permitting process.⁸⁵ Moreover, TCEQ has no authority to order dirt removal or modifications or personal compensation to protestants, she explained.⁸⁶

And, as set forth above, Ms. Lueg testified regarding her antidegradation review and the water hardness study for the Application with the limits approved in 2001.⁸⁷

In summary, the ED maintains that the Draft Permit is protective of water quality, including the protection of human health, existing uses of the receiving waters, and use and enjoyment of Mr. Stewart's properties, in accordance with applicable regulations. The ED also argues that Mr. Stewart failed to present evidence to rebut the presumption that the permit complies with the TSWQS or otherwise is not protective of water quality.

3. Applicant's Evidence and Position

Lyondell echoes the ED's position that Mr. Stewart failed to rebut the prima facie demonstration that the Draft Permit is protective of water quality (or otherwise violates any TCEQ rule or the IPs).

⁸⁵ ED Ex. MB-1 (Baez Dir.) at 12.

⁸⁶ ED Ex. MB-1 (Baez Dir.) at 13.

⁸⁷ ED Ex. JL-1 (Lueg Dir.) at 8.

a) Discharge of White Material

Turning to Mr. Stewart's first ground, Lyondell argues that Mr. Stewart's evidence regarding white discharge is unreliable, lay-witness opinion testimony that misidentifies what is actually a white reflection on the water's surface⁸⁸ and muddy water in the immediate aftermath of heavy rainfall.⁸⁹ Lyondell also posits that there is no evidence of a causal connection between the Facility and the white discharge. Moreover, Dr. Tischler testified that none of the chemicals handled or used in Lyondell's treatment process would be expected to result in visible white material in the discharge.⁹⁰ And Mr. Stewart even testified that "Lyondell probably does not have any facility or any process that uses any kind of a white substance in their production."⁹¹ Mr. Warnement claims that Mr. Stewart's photographs only show the white reflection of the sun on the water.⁹² Additionally, both Dr. Tischler and Mr. Warnement testified that Outfall 001 can sometimes cause temporary foaming due to the velocity of the effluent falling into the rock below, which is normal.⁹³ Lyondell also points out that some of Mr. Stewart's photographs were actually taken

⁸⁸ App. Ex. 100 (Warnement Dir.) at 16; *see also* Tr. at 41-42.

⁸⁹ App. Ex. 200 (Tischler Dir.) at 19-20; *see also* Tr. at 42; App. Ex. 300 (Durbin Dir.) at 12-13, Figure 6.

⁹⁰ App. Ex. 200 (Tischler Dir.) at 9.

⁹¹ Tr. at 91.

⁹² App. Ex. 100 (Warnement Dir.) at 16-17.

⁹³ App. Ex. 100 (Warnement Dir.) at 7; App. Ex. 200 (Tischler Dir.) at 16, 20-21.

on December 18, 2021 (a Saturday on which it rained in Houston), rather than in 2023 as claimed.⁹⁴

Regarding the pumps Mr. Stewart questioned, Mr. Warnement testified that they give Lyondell better control of the quality of its discharge, enabling Lyondell to pump stormwater prior to exiting stormwater Outfall 002 to the on-site wastewater treatment plan.⁹⁵ Mr. Warnement testified that the pumps are never used to pump materials out of the Facility.⁹⁶

Dr. Durbin opined that the mineral sediment that accumulates at the mouth of the HCFCD Ditch, which causes the white discharge, is picked up by rainfall over a large area and then deposited there.⁹⁷ He testified that the Houston area received heavy rainfall on the date Mr. Stewart took the time-lapsed photographs of the water off his property on Bear Bayou Lake, creating a color change in the water.⁹⁸ According to Dr. Durbin, these photographs show suspended sediment, presumably from the HCFCD Ditch, being carried into Bear Bayou Lake.⁹⁹ Dr. Durbin also opined that the size of the sediment delta in Bear Bayou Lake indicates that the delta is composed of sediment carried by stormwater through, rather than sediment from, the HCFCD

⁹⁴ App. Ex. 300 (Durbin Dir.) at 12-14. This information was derived from the file date information when the files were given to Dr. Durbin. App. Ex. 300 (Durbin Dir.) at Figure 5. Mr. Stewart conceded that he may have made a mistake, but he is “pretty sure about 2023.” Tr. at 123.

⁹⁵ App. Ex. 100 (Warnement Dir.) at 8-9.

⁹⁶ App. Ex. 100 (Warnement Dir.) at 8-9.

⁹⁷ App. Ex. 300 (Durbin Dir.) at 10.

⁹⁸ App. Ex. 300 (Durbin Dir.) at 13.

⁹⁹ App. Ex. 300 (Durbin Dir.) at 13.

Ditch. He explained that if the sediment came only from the HCFC Ditch, the ditch would be much larger.¹⁰⁰

b) Increased Copper Discharge Limit

Regarding the copper discharge limit, Lyondell points out that the increased copper discharge limit is based on a site-specific hardness value and that the sampling methodology was derived from the IPs—requiring at least 30 samples (collected to represent seasonal changes) for the statistical estimate of a hardness value.¹⁰¹ Here, 30 samples were taken upstream of the discharge point, as required by the IPs.¹⁰² Additionally, both Ms. Lueg and Dr. Tischler testified that the discharge will be protective of water quality, aquatic life, and human health because the standards for copper are designed to be protective of sensitive aquatic life under critical conditions.¹⁰³

In sum, Lyondell argues that Mr. Stewart's concerns regarding the copper limit are based on erroneous statistical principals that are inconsistent with the IPs.

¹⁰⁰ App. Ex. 300 (Durbin Dir.) at 9; Tr. at 75-76.

¹⁰¹ App. Ex. 200 (Tischler Dir.) at 12.

¹⁰² App. Ex. 200 (Tischler) at 12; Tr. at 53-54, 56.

¹⁰³ ED Ex. JL-1 (Lueg Dir.) at 9; App. Ex. 200 (Tischler Dir.) at 10-11.

c) Increased Permitted Discharge, Erosion, and Sediment

Lyondell first explains that it did not seek an increase in the authorized discharge rate, and there is no increase in authorized discharge rates in the Draft Permit.¹⁰⁴

Next, Mr. Warnement denied that Lyondell has ever experienced significant erosion along their discharge channel, nor has he observed any unusual erosion at the HCFCD Ditch where the discharge enters it.¹⁰⁵ He also testified that Lyondell lined their discharge channel with rocks to prevent erosion and break up the flow.¹⁰⁶ Mr. Warnement also explained that the pumps and moat depicted in Mr. Stewart's photographs are related to stormwater and do not connect to any of the outfalls related to the Draft Permit.¹⁰⁷

Lyondell finally argues that Mr. Stewart's claims regarding erosion have no relevance for Referred Issue B because soil erosion is not within the TCEQ's jurisdiction or a part of the TPDES permitting process.¹⁰⁸ And, they argue, even if erosion was a consideration, the authorized discharge has not and will not cause erosion of the HCFCD Ditch.¹⁰⁹ In addition, Lyondell maintains that the suspended

¹⁰⁴ ED Ex. JL-1 (Lueg Dir.) at 8; ED Ex. MB-1 (Baez Dir.) at 12; App. Ex. 100 (Warnement Dir.) at 6.

¹⁰⁵ App. Ex. 100 (Warnement Dir.) at 10-11.

¹⁰⁶ App. Ex. 100 (Warnement Dir.) at 11.

¹⁰⁷ App. Ex. 100 (Warnement Dir.) at 8-10.

¹⁰⁸ ED Ex. JL-1 (Lueg Dir.) at 9; ED Ex. MB-1 (Baez Dir.) at 12.

¹⁰⁹ App. Ex. 200 (Tischler Dir.) at 23; App. Ex. 300 (Durbin Dir.) at 10-11.

solids authorized to be discharged from Outfall 001 in the treated wastewater stream are not the type of mineral solids that could contribute to downstream sediment build-up in Bear Bayou Lake.¹¹⁰ Instead, Lyondell proffers, the sediment buildup is more likely caused by high-velocity flows in the HCFCD Ditch during major rain events that comes from the San Jacinto River, rather than from the HCFCD Ditch.¹¹¹

4. OPIC's Position

OPIC found Dr. Durbin's opinion that the sediment accumulation is not likely caused by materials in Lyondell's effluent convincing.¹¹² OPIC also concluded that Mr. Stewart's evidence does not clearly show that the flow from Outfall 001 is eroding the channel or transporting significant amounts of sediment under normal conditions.¹¹³ OPIC acknowledges Mr. Stewart's concerns regarding the changes in the HCFCD Ditch and Bear Bayou Lake but concludes that he did not meet his burden.

Similarly, OPIC found the ED's witnesses' testimony regarding copper limits convincing and agreed that Lyondell's site-specific copper calculations are appropriate.¹¹⁴

¹¹⁰ App. Ex. 200 (Tischler Dir.) at 15-16; App. Ex. 300 (Durbin) at 10; Tr. at 74.

¹¹¹ App. Ex. 200 (Tischler Dir.) at 23; App. Ex. 300 (Durbin) at 9-10.

¹¹² OPIC Closing Brief at 8.

¹¹³ OPIC Closing Brief at 8.

¹¹⁴ OPIC Closing Brief at 10.

OPIC concluded that Mr. Stewart failed to rebut the prima facie demonstration provided by the filing of the Administrative Record and, as such, that Lyondell met its burden of proof.

5. ALJ's Analysis

The ALJ finds that the weight of the evidence demonstrates that the Draft Permit is protective of water quality, wildlife, and Mr. Stewart's and his family's health, in accordance with applicable requirements.

a) Discharge of White Material

Mr. Stewart argues against the Draft Permit on three grounds—two of which primarily relate to water quality and one of which concerns erosion and sediment buildup. First, Mr. Stewart argues that Lyondell has no permit for the white material being discharged from Outfall 001, as depicted in his photographs and videos. Dr. Tischler credibly testified that none of the chemicals handled or used in Lyondell's treatment process would be expected to result in visible white material in the discharge and, Mr. Stewart testified to the same effect. Indeed, Mr. Stewart explained that he does not believe the white substance is from the Facility's processing; he simply questioned if it was from another source like railcar cleaning. Mr. Warnement testified, however, that the pumps are only used to recycle material in stormwater back into the Facility for further treatment; they are never used to pump materials out of the Facility.

Dr. Durbin testified that the Houston area received heavy rainfall on the date Mr. Stewart took the time-lapsed photographs of the water off his property. These photographs show, Dr. Durbin explained, suspended sediment, presumably from the HCFCD Ditch, being carried into Bear Bayou Lake. Dr. Durbin also credibly opined that the delta is composed of sediment carried by stormwater through, rather than sediment from, the HCFCD Ditch. He explained that if the sediment came only from the HCFCD Ditch, the ditch would be much larger.

In addition, Dr. Baez testified that the original permit writer adhered to the TCEQ's Water Quality Assessment Section of the technical review and developed water quality-based effluent limitations based on this assessment and federal effluent guidelines. Moreover, Dr. Baez testified that all applicable rules and guidelines were adhered to when the permit was drafted and that the Draft Permit contains technology-based effluent limitations reflecting the best controls available. And the Draft Permit contains an explicit prohibition on discharge of floating solids or visible foam in other than trace amounts.

Mr. Stewart's evidence simply raises questions about the cause and makeup of a white substance he observes several times a year in the HCFCD Ditch and Bear Bayou Lake. There was no credible evidence regarding the identity or makeup of the white substance depicted. Moreover, there was no evidence that the white material is caused by or related to Lyondell or the Facility. Finally, there was no evidence that this material violates any applicable TCEQ rule or requirement.

b) Increased Copper Discharge Limit

Mr. Stewart next disputes the Draft Permit's increased copper discharge limit. He takes issue with the sampling of the receiving waters and the "T" test TCEQ used for copper. More specifically, Mr. Stewart argues that this test is used to analyze small samples of unknown variance. Additionally, he maintains that the sampling points were from a six-mile radius, taken from bayous and roadside ditches not connected to the receiving waters, possibly taken from an old study, and that it is unknown whether any of them came from a normally distributed population. Although Mr. Stewart raises issues with the sampling methodology, he failed to provide anything more than speculative argument and did not allege that the methodology failed to comply with TCEQ requirements.

On the other hand, Ms. Lueg testified that she reviewed the Draft Permit, and the sampling methodology used in the site-specific hardness study regarding copper limits complies with TCEQ requirements. As Ms. Lueg and Dr. Tischler explained, the 30 samples taken provided a statistically reliable estimate of the hardness value used for the site-specific copper water quality standard per the IPs. The samples were taken from areas outside the receiving waters (thereby not impacted by Lyondell's discharge) to ascertain the water quality in the HCFCD Ditch without the effects of the discharge.

Dr. Baez also testified that she considered the copper limits of the Draft Permit and found that they are protective of aquatic life and wildlife in the HCFCD Ditch and the San Jacinto River Tidal because the limitations were calculated for this very reason. Additionally, the Draft Permit has whole effluent toxicity testing

requirements (biomonitoring), which is the most direct measure of potential toxicity. Both Ms. Lueg and Dr. Tischler also testified that the discharge will be protective of water quality, aquatic life, and human health because the standards for copper are designed to be protective of sensitive aquatic life under critical water conditions.

c) Increased Permitted Discharge, Erosion, and Sediment

Finally, Mr. Stewart raises concerns about the capacity of the HCFCD Ditch and the related erosion and sediment buildup in Bear Bayou Lake. As an initial matter, erosion is not within the TCEQ's jurisdiction or part of the TPDES permitting process. Moreover, the Application did not seek an increase in the authorized discharge rate, and there is no increase in authorized discharge rates in the Draft Permit.

Dr. Durbin testified that the delta in Bear Bayou Lake was formed by deposition of sediment from across the drainage basin served by the HCFCD Ditch and the transport of sediment down the San Jacinto River. Mr. Warnement denied that Lyondell has experienced significant erosion along their discharge channel, and he has not seen any unusual erosion at the HCFCD Ditch where the discharge enters it. He also testified that Lyondell lined their discharge channel with rocks to prevent erosion and break up the flow.

After considering the evidence and arguments, the ALJ concludes that Lyondell ultimately met its burden of proof that the Draft Permit is protective of water quality, including the protection of human health, existing uses of the receiving waters, and the use and enjoyment of Mr. Stewart's property.

IV. TRANSCRIPT COSTS

30 Texas Administrative Code section 80.23(d) provides for the allocation of transcript costs among the parties, excluding the ED and OPIC. In allocating those costs, the Commission is to consider the following applicable factors in allocating reporting and transcription costs among the other parties:

- 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 costs.

The ALJ ordered the parties to arrange to have a court reporter attend the hearing and prepare a transcript, subject to an allocation of costs afterward. Lyondell incurred a total of \$2,953.25 in reporting and transcription costs.¹¹⁵ No party disputed that amount. Lyondell proposes that one-quarter of the total costs should be allocated to Mr. Stewart.¹¹⁶

Lyondell and Mr. Stewart were the primary participants at the hearing. They both benefited from the transcript. There is no direct evidence concerning the respective financial abilities of Lyondell or Mr. Stewart to pay the transcript cost.

¹¹⁵ Lyondell Closing Argument at 23, Attachment A.

¹¹⁶ Lyondell Closing Br. at 24.

Lyondell, however, is more likely to have the ability to pay than Mr. Stewart, who is an individual. This matter is also at issue because Lyondell is the party seeking a benefit—a permit amendment and renewal for its Facility. After considering the relevant factors, the ALJ determines that Lyondell should bear the transcript costs.

V. CONCLUSION AND RECOMMENDATION

For the reasons stated above, the ALJ concludes that Lyondell met its burden of providing that the Draft Permit complies with all applicable legal and technical requirements. In further support of this recommendation, the ALJ has prepared the Findings of Fact and Conclusions of Law incorporated with the accompanying proposed Order of the Commission.

Signed August 15, 2025



Megan Johnson
Presiding Administrative Law Judge



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**AN ORDER
GRANTING APPLICATION BY
LYONDELL CHEMICAL COMPANY FOR
MAJOR AMENDMENT WITH RENEWAL TO
TPDES PERMIT NO. WQ0002927000
SOAH DOCKET NO. 582-24-14115,
TCEQ DOCKET NO. 2023-0574-IWD**

On _____, the Texas Commission on Environmental Quality (TCEQ or Commission) considered the application of Lyondell Chemical Company (Lyondell) for a major amendment and renewal to its Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0002927000 in Channelview, Texas. A Proposal for Decision (PFD) was presented by Administrative Law Judge (ALJ) Megan Johnson with the State Office of Administrative Hearings (SOAH), who conducted an evidentiary hearing concerning the matter on June 5, 2025, via Zoom videoconference.

After considering ALJ's PFD, the Commission adopts the following Findings of Fact and Conclusions of Law.

I. FINDINGS OF FACT

Application

1. Lyondell Chemical Company (Lyondell or Applicant) owns and operates the Lyondell Channelview South Plant, a synthetic organic chemical manufacturing plant, located at 2502 Sheldon Road in Channelview, Texas (Facility).
2. Texas Commission on Environmental Quality (TCEQ or Commission) Industrial Wastewater Permit No. WQ0002927000 authorizes the discharge of process wastewater, stormwater, utility water, and other streams from the Facility from a variety of outfalls.
3. The treated effluent from the Facility is discharged into the San Jacinto River Tidal, which has a high aquatic life use (ALU) designation.
4. Lyondell filed an application (Application) for major amendment with renewal of Permit No. WQ0002927000 with the TCEQ on January 5, 2021.
5. The Application requests renewal of Permit No. WQ0002927000. In addition, the Application requests authorization for the following changes:
 - to use a site-specific hardness for calculating water quality-based effluent limits, to authorize increased copper limits at Outfall 001;
 - to remove limits and monitoring requirements for total aluminum, total zinc, and total xylenes at Outfall 001;
 - to add wastestreams to Outfalls 001, 002, and 008;
 - to modify various wastewater descriptions;
 - to increase the daily maximum pH limit at Outfall 002;
 - to reduce the monitoring frequency at Outfalls 002 and 003 for total organic carbon and oil and grease;
 - to use site-specific partitioning coefficients for aluminum at Outfalls 003, 004, and 005 for calculating water quality-based effluent limits;

- to update the discharge and monitoring locations for Outfalls 008, 009 and 010;
 - to revise the discharge route description for Outfall 009;
 - to remove Other Requirements Nos. 5, 12, and 14; and
 - to update Other Requirement No. 4.
6. The TCEQ Executive Director (ED) declared the Application administratively complete on February 5, 2021. The ED completed the technical review of the Application on September 28, 2021, and prepared a draft permit (Draft Permit) and made it available for public review and comment.

Notice and Jurisdiction

7. The Notice of Receipt of Application and Intent to Obtain a Water Quality Permit was published in English in the *Houston Chronicle* dba *Pasadena Citizen*, a newspaper published or generally circulated in Harris County, on March 31, 2021, and in Spanish in the *Houston Chronicle* dba *La Voz* on April 4, 2021.
8. The Notice of Application and Preliminary Decision was published in English in the *Houston Chronicle* dba *Pasadena Citizen* on October 27, 2021, and in Spanish in the *Houston Chronicle* dba *La Voz* on October 27, 2021.
9. TCEQ received public comments on the Application and the ED prepared a Response to Public Comment, which was filed with the TCEQ Chief Clerk's Office on October 20, 2022.
10. On January 31, 2024, the Commission issued an Interim Order referring the following issues to the State Office of Administrative Hearings (SOAH) for a contested case hearing:
- A. Whether the draft permit complies with TCEQ's antidegradation policy pursuant to 30 Texas Administrative Code section 307.5.
 - B. Whether the draft permit is protective of water quality, including the protection of human health, existing uses of the receiving waters, and use and enjoyment of requesters properties, in accordance with

applicable regulations including the Texas Surface Water Quality Standards (TSWQS) in 30 Texas Administrative Code chapter 307.

11. Notice of the Preliminary Hearing was published in the *Houston Chronicle* on May 2, 2024. The notice included the time, date, and place of the hearing, and a brief description of the nature and purpose of the hearing, including the applicable rules and procedures.

Proceedings at SOAH

12. On June 5, 2024, SOAH Administrative Law Judge (ALJ) Megan Johnson convened the preliminary hearing via videoconference. Lyondell, the ED, the TCEQ's Office of Public Interest Counsel (OPIC), and Douglas Stewart appeared and were named parties.
13. Jurisdiction was noted by the ALJ, and the Administrative Record was admitted into evidence (Tabs A through F).
14. The admittance of the Administrative Record established a *prima facie* demonstration that a final permit, if issued in the same form as the Draft Permit, meets all state and federal legal and technical requirements and protects human health and safety, the environment, and physical property. Tex. Gov't Code § 2003.047(i-1); 30 Tex. Admin. Code § 80.127(h).
15. On January 17, 2025, the ALJ issued Order No. 3 adopting the procedural schedule.
16. SOAH conducted a hearing on the merits of the Application on June 5, 2025. Attorneys Whit Swift and Sara Burgin represented Lyondell. Attorney Harrison Malley represented the ED. Attorney Thomas Mercer represented OPIC. Protestant represented himself.
17. The record closed after the submission of closing briefs on June 27, 2024.

Issue A: Antidegradation

18. The ED's antidegradation review of the Application was consistent with TCEQ rules, including 30 Texas Administrative Code section 307.5.

19. The Draft Permit complies with the TCEQ's antidegradation policy pursuant to 30 Texas Administrative Code section 307.5.

Issue B: Protection of Water Quality

20. The applicable water quality standards are the 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.
21. The TSWQS designate uses for the state's surface waters and establish narrative and numerical water quality standards to protect those uses.
22. The TSWQS and TCEQ standard procedures for implementing the TSWQS, known as IPs, are used to set permit limits for wastewater discharges.
23. Both the TSWQS and IPs are approved by the United States Environmental Protection Agency.
24. None of the chemicals handled or used in the wastewater treatment process at the Facility would be expected to result in visible white material in Lyondell's wastewater discharge.
25. There is no white discharge from the treated process wastewater from Lyondell's Outfall 001.
26. The copper discharge limit that applies to Outfall 001 in the Draft Permit is based on a site-specific study of the water hardness of the receiving water, Harris County Flood Control District (HCFCD) Ditch No. G103-02-03 (HCFCD Ditch).
27. The sampling methodology used for the site-specific study complied with the TCEQ's IPs.
28. The sampling methodology used for the site-specific study provided a reasonable and representative basis for the increased copper discharge limit in the Draft Permit.

29. The ED's technical review of the Draft Permit considered the potential impacts of the increased copper limit on aquatic life in HCFCD Ditch, Bear Bayou Lake, and the San Jacinto River.
30. It is not within the TCEQ's jurisdiction to consider soil erosion as part of the TPDES industrial wastewater permitting process.
31. The Draft Permit does not seek an increase in the daily effluent discharge rates authorized under Permit No. WQ0002927000.
32. The Draft Permit is protective of water quality, including the protection of human health, existing uses of the receiving waters, and the use and enjoyment of requester's properties, in accordance with applicable regulations including the TSWQS in 30 Texas Administrative Code chapter 307.

Transcription Costs

33. Reporting and transcription of the hearing on the merits was warranted because the hearing was set for three days.
34. Lyondell incurred a total of \$2,953.25 in reporting and transcription costs.
35. Lyondell and Mr. Stewart were the primary participants at the hearing, and they both benefited from the transcript.
36. There is no direct evidence concerning the respective financial abilities of Lyondell or Mr. Stewart to pay the transcript cost. Lyondell is more likely to have the ability to pay than Mr. Stewart, who is an individual.
37. Lyondell is the party seeking a benefit—a permit amendment and renewal for its Facility.

II. CONCLUSIONS OF LAW

1. TCEQ has jurisdiction over this matter. Tex. Water Code Chs. 5, 26.
2. The Application was referred to SOAH under Texas Water Code section 5.556.

3. 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.
4. 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.
5. The Application is subject to the requirements in Senate Bill 709, effective September 1, 2015, that apply to applications submitted to TCEQ after September 1, 2015. Tex. Gov't Code § 2003.047(i-1)-(i-3).
6. A contested case hearing referred to SOAH under Texas Water Code section 5.556 is limited to those issues referred to SOAH by the Commission. Tex. Gov't Code § 2003.047(e)-(f); 30 Tex. Admin. Code § 55.211(c).
7. Admission of the administrative record into evidence established a *prima facie* demonstration that: (1) the Draft Permit meets all state and federal technical and legal 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), .127(h).
8. To rebut the *prima facie* demonstration, a party must present evidence that (1) relates to one of the referred issues; and (2) demonstrates that one or more provisions in the Draft Permit violates a specifically applicable state or federal requirement. Tex. Gov't Code § 2003.047(i-2); 30 Tex. Admin. Code §§ 80.17(c)(2), .117(c)(3).
9. Applicant retains the burden of proof, by a preponderance of the evidence, 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).
10. The burden of proof on the issues referred to SOAH is on the Applicant by a preponderance of the evidence. 1 Tex. Admin. Code § 155.427; 30 Tex. Admin. Code § 80.17(a).

11. The Draft Permit is protective of water quality, wildlife, and Mr. Stewart's health, in accordance with applicable regulations, including the TSWQS.
12. The Draft Permit complies with applicable antidegradation requirements and adequately protects existing uses.
13. 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).
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 section 80.23(d)(1), a reasonable assessment of hearing transcript costs is in full to Lyondell.

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. Lyondell Chemical Company's Application for a major amendment with renewal of Industrial Wastewater Permit No. WQ0002927000 is granted as set forth in the Draft Permit.
2. Lyondell must pay the reporting and transcription costs.
3. The Commission adopts the ED's Response to Public Comment in accordance with 30 Texas Administrative Code section 50.117. If there is any conflict between the Commission's Order and the ED's Responses to Public Comment, the Commission's Order prevails.

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 section 2001.144 and 30 Texas Administrative Code section 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: August 15, 2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Brooke Paup, Chair, For the Commission