CAUSE NO. _____

PORT ARANSAS CONSERVANCY, *Plaintiff*,	§	IN THE DISTRICT COURT
v.	§	TRAVIS COUNTY, TEXAS
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, *Defendant*	§	____ JUDICIAL DISTRICT

PLAINTIFF'S ORIGINAL PETITION FOR JUDICIAL REVIEW

Plaintiff Port Aransas Conservancy ("PAC" or "Plaintiff") seeks judicial review of a decision by the Texas Commission on Environmental Quality ("Commission" or "TCEQ") granting Texas Pollutant Discharge Elimination System ("TPDES") Permit No. WQ0005253000 to the Port of Corpus Christi Authority of Nueces County, Texas ("Port" or "Applicant"). Plaintiff asserts that TCEQ's decision was replete with error and should be reversed.

This is a permit that two Administrative Law Judges ("ALJs") initially determined should be denied and which the United States Environmental Protection Agency ("EPA") has currently objected to and advised TCEQ is not a valid permit under the Clean Water Act ("CWA"). When the court reviews the record in this case, it will be clear that this is a permit that TCEQ was determined to approve, no matter the law or legal standards to be applied. An objective, independent review of the record will reveal that TCEQ acted in clear error in approving this permit. In support hereof, Plaintiff shows the following:

I. DISCOVERY

1. This case is an appeal of an administrative agency's actions and, therefore, review is based on the administrative record. However, to the extent that discovery is allowed, it should be conducted in accordance with a Level 3 discovery control plan under Tex. R. Civ. P. 190.4.

2. Plaintiff seeks only non-monetary relief. Tex. R. Civ. P. 47(c)(5).

II. PARTIES

3. Plaintiff is a 501(c)(4) environmental non-profit association whose goal is to foster a balance of conservation and economically sustainable uses for Port Aransas and its surrounding neighborhood and waterways. Plaintiff was granted party status by the TCEQ in the underlying contested case proceeding and participated as an active party in the administrative proceeding upon which this appeal is based.

4. Defendant TCEQ is an agency of the State of Texas, created under Chapter 5 of the Texas Water Code, responsible for regulating the discharge of pollutants into the waters of the state and has jurisdiction for issuing a TPDES permit under Chapters 5 and 26 of the Texas Water Code, including sections 5.013, 26.003, 26.011, 26.027, and 26.028, and administering the laws related thereto. Pursuant to Tex. Water Code § 5.357, Defendant TCEQ may be served through its acting Executive Director, Erin Chancellor, at 12100 Park 35 Circle, Austin, Texas 78753.

5. The Port is the applicant for TPDES Permit No. WQ0005253000 and was a party to the contested case hearing underlying this appeal. The Port is a political subdivision of the State of Texas and may be served through its corporate representatives or chief executive officer, Sean Strawbridge, at 400 Harbor Drive, Corpus Christi, Texas 78401.

6. The Office of Public Interest Counsel ("OPIC") of the TCEQ is a statutorily-created entity under Tex. Water Code §5.271. OPIC participated in the underlying contested case hearing as a named party. OPIC may be served through the Public Interest Counsel, Garrett Arthur, at 12100 Park 35 Circle, Austin, Texas 78753.

7. Audubon Texas, the state branch of The National Audubon Society, a not-for-profit 501(c)(3) organization, participated in the administrative hearing as a party and may be served through its Executive Director, Lisa Gonzalez, at 2407 S. Congress Avenue, Suite E-477, Austin, Texas 78704.

8. The following individuals participated as parties, through legal counsel, in the underlying contested case hearing and have agreed to be served through their legal counsel, David Frederick, of the law firm of Perales, Allmon & Ice, P.C., 1206 San Antonio Street, Austin, Texas 78701: James Harrison King, Tammy King, Sam Steves, and Edward Steves.

9. The following individuals participated as parties, as self-represented litigants, and may be served at the addresses identified for each in Attachment 1 to this Petition: Stacey S. Bartlett, Jo Ellyn Krueger, Sarah Searight, and Lisa Moncrief Turcotte.

III. JURISDICTION

10. This court has jurisdiction over Defendant TCEQ as an agency of the government of the State of Texas. Pursuant to Tex. Water Code § 5.351, a person affected by an order, decision or other act of TCEQ may file a petition to review, set aside, modify or suspend such action. Under Tex. Gov't Code § 2001.171, a person who has exhausted all administrative remedies available within a state agency and who is aggrieved by a final decision in a contested case is entitled to seek judicial review.

11. Plaintiff timely filed a motion for rehearing on January 13, 2023, which was overruled by operation of law on February 13, 2023. This Original Petition is timely filed within 30 days after the effective date of the TCEQ Order. Texas Water Code § 5.351(c); Tex. Gov't. Code § 2001.176(a). All other conditions precedent have been performed or occurred. *See* Texas Water Code § 5.351(c).

IV. VENUE

12. Venue in Travis County, Texas, is proper pursuant to Tex. Water Code § 5.354 and Tex. Gov't Code § 2001.176(b)(1).

V. TRANSMITTAL OF ADMINISTRATIVE RECORD

13. Demand is hereby made that TCEQ transmit a certified copy of the entire record of its proceedings to this court within the time permitted by law for filing an answer in this case, as required by Tex. Gov't Code § 2001.175(b).

VI. FACTS

14. On March 7, 2018, the Port filed an application ("Application") for a new TPDES permit with TCEQ, seeking authorization to discharge up to 110 million gallons per day of wastewater into the Corpus Christi Ship Channel in Nueces County, Texas.

15. TCEQ's Executive Director ("ED") declared the Application administratively complete on June 26, 2018.

16. On November 21, 2019, TCEQ issued an interim order granting certain hearing requests, referring certain hearing requests to the State Office of Administrative Hearings ("SOAH") for an affectedness determination, denying certain hearing requests and requests for reconsideration, and referring the Application to SOAH for a contested evidentiary hearing on the following nine identified issues: (A) Whether the proposed discharge will adversely impact: the marine environment, aquatic life, and wildlife, including birds and endangered or threatened species, spawning eggs, or larval migration; (B) Whether the proposed discharge will adversely impact the health of the requesters and their families, including whether fish and other seafood will be safe for human consumption; (C) Whether the proposed discharge will adversely impact recreational activities, commercial fishing, or fisheries in Corpus Christi Bay and the ship channel; (D) Whether the Application, and representations contained therein, are complete and accurate; (E) Whether the Applicant substantially complied with applicable public notice requirements; (F) Whether the draft permit is consistent with the Texas Coastal Management Program's goals

and policies; (G) Whether the modeling complies with applicable regulations to ensure the draft permit is protective of water quality, including utilizing accurate inputs; (H) Whether the Executive Director's antidegradation review was accurate; and (I) Whether the draft permit includes all appropriate and necessary requirements.

17. On November 4-6 and 9-10, 2020, a hearing on the merits was conducted before two ALJs with SOAH. The evidentiary record was closed on November 10, 2020, and the hearing record closed on January 12, 2021, after the parties filed written closing arguments and proposed findings of fact and conclusions of law.

18. On February 5, 2021, the ALJs issued a proposal for decision ("PFD") recommending that the Application be denied, which was considered by TCEQ at an open meeting on May 19, 2021.

19. At the open meeting, the TCEQ Commissioners declined to accept the ALJs' recommendation and instead voted to remand the permit application for additional proceedings. On May 26, 2021, TCEQ Chairman Jon Niermann signed and issued an *Interim Order* remanding the case to SOAH for the ALJs to "[a]pply the appropriate legal standard for non-numeric criteria found in 30 Tex. Admin. Code ("TAC") § 307.6(e)(l) for evaluating the impacts to aquatic organisms that move through a zone of initial dilution;" and to take additional evidence on the following issues: (A) Whether the proposed discharge will adversely impact: the marine environment, aquatic life, and wildlife, including birds and endangered or threatened species, spawning eggs, or larval migration; (C)[1] Whether the proposed discharge will adversely impact recreational activities, commercial fishing, or fisheries in Corpus Christi Bay and the ship channel;

[1] In identifying remand issues, the TCEQ's Interim Order tracked the original referred issues and identifying letters; some issues, like original referred issue (B), were not identified for remand in the Interim Order.

(D) Whether the Application, and representations contained therein, are complete and accurate; (G) Whether the modeling complies with applicable regulations to ensure the draft permit is protective of water quality, including utilizing accurate inputs; (H) Whether the Executive Director's antidegradation review was accurate; and (I) Whether the draft permit includes all appropriate and necessary requirements.

20. On March 14-25, 2022, the hearing on the merits on remand was conducted before two ALJs with SOAH. The evidentiary record was closed on March 25, 2022, and the hearing record closed on April 22, 2022, after the parties filed written closing arguments and proposed findings of fact and conclusions of law.

21. On June 20, 2022, the ALJs issued a proposal for decision on remand ("PFD on Remand") recommending that the Application be granted, but only if additional requirements and limits were imposed.

22. On September 7, 2022, the PFD on Remand was considered by TCEQ at an open meeting.

23. On December 20, 2022, TCEQ Chairman Jon Niermann signed and issued *An Order Granting the Application of Port of Corpus Christi Authority of Nueces County for TPDES Permit No. WQ0005253000; TCEQ DOCKET NO. 2019- 1156-IWD; SOAH DOCKET NO. 582-20-1895,* a copy of which is attached to this Petition as Attachment 2 ("Commission Order").

24. On January 13, 2023, Plaintiff timely filed a motion for rehearing pursuant to 30 TAC § 80.272 and Tex. Gov't Code §§ 2001.145 and 2001.146. A copy of this motion is attached as Attachment 3.

25. TCEQ did not rule on the motion for rehearing in the time allowed by law. Pursuant to Tex. Gov't Code § 2001.146(c), a motion for rehearing is overruled by operation of law 55 days

after the date the decision or order is signed. Therefore, Plaintiff's motion for rehearing was overruled by operation of law on February 13, 2023.

26. Pursuant to Tex. Gov't Code § 2001.176(a), a petition for judicial review in a contested case must be filed not later than the 30th day after the date the decision or order that is the subject of complaint is final and appealable. In this matter, the Commission's order became final and appealable on February 13, 2023, per Tex. Gov't Code § 2001.144(a)(2)(B). Thus, the petition for review in this matter must be filed by March 15, 2023, which is 30 days after February 13, 2023. Accordingly, this petition is timely filed.

VII. GROUNDS FOR REVERSAL AND REMAND[2]

27. There are numerous grounds for reversal in this case, as TCEQ has committed many errors in pushing through this permit without the requisite review and without regard for the serious harm it will do to the environment and the local economy. TCEQ's review was so poor and legally lacking that the EPA has notified TCEQ that this permit is not considered a valid permit under federal law. *See* Attachment 4. Moreover, because of this specific permit and the improper way in which TCEQ has processed it, the EPA has notified TCEQ that it is now rescinding a prior waiver granted by EPA to TCEQ and that all new desalination applications are subject to EPA review before issuance. *See* Attachment 5. The specific numerous errors by TCEQ are identified below.

A. Error No. 1: TCEQ Directed the ALJs to Apply, and Did Itself Apply, an Incorrect Legal Standard for Review of the Lethality of the Discharge.

28. In the original hearing, the ALJs determined that the proper review for the permit involved in this case was under 30 TAC §§ 307.6(c)(6) and 307.8(b)(2), which require that there

[2] Plaintiff incorporates by reference all allegations and arguments contained in the Motion for Rehearing, attached as Attachment 3, and in this action Plaintiff challenges all fact findings from the Commission Order identified in that motion.

"must be *no lethality* to aquatic organisms that move through a ZID" [Zone of Initial Dilution] as a result of a discharge allowed under the permit. As discussed at length during the hearing, the Texas Surface Water Quality Standards ("TSWQS") specifically state, in regard to discharges, that:

> Acute criteria and acute total toxicity levels may be exceeded in small zones of initial dilution (ZIDs) at discharge points of permitted discharges, but there must be no lethality to aquatic organisms that move through a ZID.[3]

29. This standard was the one that nearly all witnesses, including TCEQ Staff and one or more of the Port's own witnesses, testified was the proper analysis under the TSWQS. Despite such testimony, and the clear language of the rules, TCEQ erroneously determined that the ALJs should not apply this standard.

30. When it remanded this case for a second hearing, TCEQ instructed the ALJs to apply a different standard found in 30 TAC § 307.6(e)(1). But, as the ALJs wrote in the original PFD, that section governs a different element—namely the "standards related to toxicity testing of effluent."[4] As the ALJs noted, the provision that TCEQ ordered the ALJs to apply on remand is titled "[t]otal toxicity," which is a defined term meaning "Toxicity as determined by exposing aquatic organisms to samples or dilutions of instream water or treated effluent. Also referred to as whole effluent toxicity or biomonitoring." The ALJs further noted that this provision relates simply to the standards for toxicity testing of effluent and not the standards for discharges themselves. Thus, the ALJs found that the correct standard for review was found in sections 307.6(c)(6) and 307.8(b)(2), which require that there can be "no lethality to aquatic organisms that move through a ZID."

[3] 30 TAC § 307.8(b)(2).

[4] Feb. 5, 2021 PFD at 9.

31. In 2020, nearly every witness to testify agreed that this "no lethality" standard applied by the ALJs was the correct standard. That included the Port's expert witness, Lial Tischler, who testified:

> Q: Is it your understanding that the rules of TCEQ require ***no lethality*** even at the zone of initial dilution?
>
> A: Yes, you mean within the zone of initial dilution?
>
> Q: Yes.
>
> A: The answer is yes.[5]

And the ED's witnesses, such as Dr. Wallace, testified:

> Q: The regulations, TCEQ regulations, actually dictate that for this discharge, there has to be ***no death anywhere***, even in the zone of initial dilution, isn't that right?
>
> A: Actually, that's for all permits, ma'am.
>
> Q: So is that a "yes," that there can be no death?
>
> A: Yes, but it applies to all permits.[6]
>
> . . . .
>
> Q: In this antidegradation review, was there any considera- -- besides human health concerns, was there any concern for any effects on oysters themselves, just as a marine creature?
>
> A: They were considered as part of the exceptional aquatic life use, yes.
>
> Q: Okay. So they're not supposed to die as a result of this discharge, either, are they?
>
> A: No.[7]

[5] Original Hearing Tr. Vol. 3 at 245. (Emphasis added).

[6] Original Hearing Tr. Vol. 5 at 178-179. (Emphasis added).

[7] Original Hearing Tr. Vol. 5 at 170-171.

32. The ALJs originally applied the correct legal standard and the ALJs' original recommendation for denial was based on the failure by the Port to meet that correct legal standard. The permit should have been denied. Instead, TCEQ committed reversible error by failing to deny the permit after the first hearing, applying an incorrect legal standard on remand, and then issuing the Order approving the permit.

33. Plaintiff's substantial rights were prejudiced by this error. The increased death of aquatic species resulting from the application of the wrong standard will impair the abundance and diversity of aquatic life, including redfish, thereby impairing Plaintiff's right to fish in navigable waters, and the right to fish as granted under the Texas Constitution. *Diversion Lake Club v. Heath*, 58 S.W.2d 566, 570 (Tex. Civ. App. – Austin 1933), *aff'd*, 86 S.W.2d 441 (Tex. 1935); Texas Constitution Article I, Section 34.

B. Error No. 2: TCEQ Failed to Properly Classify and Evaluate this Permit Application as Being for a Major Facility.

34. In issuing its Order, TCEQ relied on the ED's evaluation of the permit which classified and treated the proposed permit as being for a minor discharge. This is clearly erroneous. The EPA determined and advised the ED that the permit must be treated as a major discharge under federal rules that apply to TCEQ permitting. *See* Attachment 4, attached December 15, 2021 EPA letter). Because of TCEQ's complete failure to properly classify desalination facility discharges as major discharges, the EPA rescinded the waiver of review it had previously granted to TCEQ and has now required TCEQ to submit all desalination discharge permits to EPA for review. *See* Attachments 4 and 5. To date, TCEQ has not corrected this error and the permit was issued on the basis that the discharge was a minor discharge, which renders the permit review insufficient.

35. One of the first steps in TCEQ's review process is to determine whether a permit is "Major" or "Minor." This should be relatively straightforward but, according to the EPA, the ED miscalculated the points assessed under the EPA Permit Rating Worksheet for determining what is a Major permit by at least 35 points,[8] and incorrectly classified the discharge as Minor when it is actually Major.

36. Whether an application is Major or Minor directly impacts 1) the type of review that TCEQ must conduct as part of its application review process,[9] and 2) whether the TCEQ Draft Permit must be provided to EPA for its review and its right to object to terms or issuance.

37. The definitions of Major and Minor come from federal regulations, developed and overseen by EPA, and the evaluation is made by the ED using an EPA-promulgated worksheet. The EPA objection letter states that the ED's permit review fell short of compliance with applicable federal regulations and the Draft Permit would "not be a validly issued NPDES permit" if issued without addressing all of EPA's concerns. TCEQ staff testified at the hearing that they knew that EPA was not satisfied with their response, but ultimately they did not change any of their review to satisfy EPA's concerns.[10] Accordingly, after the permit was issued by TCEQ, EPA advised TCEQ that the permit was not a valid permit under the CWA.

[8] Just by way of example, the ED failed to assign 10 points for a facility located in an estuary in the National Estuary Protection Program. Ex. ED-SG-8 (TPDES Permit Major/Minor Rating Work Sheet). That is a verifiable fact that is not in dispute and allows for no discretion.

[9] Remand Hearing Tr. Vol. 9 at 2260:21-24 (Ms. Gibson testifying that "discharges of processed wastewater undergo a slightly heightened review with the water quality assessment and made sure there are additional permitting requirements.").

[10] Remand Hearing Tr. Vol. 9 at 2233:16-23, 2254 - 2258.

38. EPA also told TCEQ that going forward *all* desalination facilities should be classified as Major facilities.[11] Yet TCEQ has simply ignored that directive.[12] In choosing not to classify the desalination facility as "major," TCEQ has failed to conduct the required "heightened review with the water quality assessment" and failed to include "additional permitting requirements" that apply to Major facilities.[13] This constitutes further error and renders the permit decision invalid.

39. Plaintiff's substantial rights were prejudiced by this error. The failure to conduct the heightened review required for a Major facility, and the failure to include more stringent requirements applicable to a Major facility will result in the discharge causing greater harm to the abundance and diversity of aquatic life, thereby impairing Plaintiff's right to fish in navigable waters, and the right to fish as granted under the Texas Constitution. *Diversion Lake Club v. Heath*, 58 S.W.2d 566, 570 (Tex. Civ. App. – Austin 1933), *aff'd*, 86 S.W.2d 441 (Tex. 1935); Texas Constitution Article I, Section 34.

C. Error No. 3: The Modeling Does Not Comply with Applicable Regulations nor Ensure the Revised Draft Permit Is Protective of Water Quality, Utilizing Accurate Inputs.

40. Further, the evidence relied on by TCEQ was demonstrated to be inaccurate and, thus, unreliable for issuance of the permit as a matter of law. A permit decision is only as good as the evidence used to support it. Yet in this case, the TCEQ simply ignored significant factual inaccuracies in the evidence it relied on to support issuance of the permit. This is error.

[11] Remand Hearing Tr. Vol. 9 at 2258:6-11. *See* also Attachment 4, attached December 15, 2021 EPA letter.

[12] Remand Hearing Tr. Vol. 9 at 2259:8-23.

[13] *See* Remand Hearing Tr. Vol. 9 at 2260.

41. **Channel Depth**: The Port's Original Application identified the channel depth at the discharge location as 63 feet even though the actual depth was close to 90 feet.[14] The "depth at discharge is a *required input* for the CORMIX modeling used to evaluate permits like this one and is a variable that influences the pollutant discharge mixing predictions."[15] The ALJs recognized this error and it was one of the bases for the ALJs' original recommendation that the permit be denied.

42. Rather than denying the permit for such failure to correct the obvious and significant error in the water depth at the point of discharge, TCEQ remanded the matter to allow the Port to correct that specific error. Yet, on remand, the Port made the exact same type of error again.

43. On remand, the Port moved the discharge location and submitted a revised application. For the revised application, the Port's data showed that the depth at the new location of the discharge was 65 feet.[16] But the Port and the ED used 90 feet as the CORMIX input for water depth.[17] This is ironic, because TCEQ remanded the first time when the Port used 63 feet when the depth was actually 90 feet. The Port then moved the discharge to a location where the depth is actually 65 feet, but then proceeded to use 90 feet as the depth for modeling purposes—**essentially committing the exact same error that resulted in remand the first time, but with**

[14] "While the CORMIX model is not a perfect representation of actual conditions, the results of the model are only as reliable as the accuracy of its inputs, with recognition of its limitations. In this case there is really no dispute that the inputs into the CORMIX model for channel bathymetry are not accurate. The evidence is conclusive that the depth of the channel at the outfall location is close to 90 feet, but the modeling used an input of 63 feet." Feb. 5, 2021 PFD at 30.

[15] Remand PFD at 16. (Emphasis added).

[16] Remand PFD at 36.

[17] Remand PFD at 17.

the numbers reversed. No one contends that 90 feet is the actual depth at the location specified in the revised application. Even the ALJs concede this fact.[18]

44. "CORMIX's conservative module requires the modeler to select *a single value*" for depth of discharge.[19] This single value requirement does not allow the applicant to ignore the actual depth where the discharge will take place for the use of any depth that happens to occur within the entire waterbody at a location arbitrarily selected by the modeler. TCEQ remanded for accurate information on the depth of the channel at the location of the discharge yet the Port again used a depth in its modeling that, as conceded by the ALJs, is not the actual depth at the specific location of the discharge.

45. Moreover, 90 feet is not even the deepest part of the channel in that area, as the Port's own bathymetry map shows a depth of 95 feet in the same area. Yet the Port did not use the actual depth at the location of the discharge, nor the deepest depth in the area, but simply chose an arbitrary number to include in the application. If the TCEQ remanded before because the channel depth used in CORMIX was wrong, it must be obvious that the new evidence on Remand that reflects the same error cannot be relied upon to support permit issuance.

46. **Ambient Velocity and The Local Bathymetry**: In the initial hearing "it was undisputed" that an eddy occurred near the outfall location.[20] The Port's witnesses – and its lawyers – repeatedly told the ED, the ALJs, and the Commissioners that there was an eddy as an affirmative fact.[21] But they did not stop there – they relied on that eddy for the hypothesis (never tested by the

[18] Remand PFD at 17.

[19] Remand PFD at 36.

[20] Remand PFD at 38.

[21] Certified Transcription May 19, 2021 TCEQ open meeting at 46:8-14. The certified transcript is attached hereto as Attachment 6.

Port's many experts) on which they expected everyone to rely in granting a permit: "our expert testimony provided this in the record – that that eddy and that localized increase in depth enhances the mixing, and makes, makes existing modeling more conservative."[22] On remand, the Port flipped its position, and argued there was no eddy.[23] The ALJs concluded that it was unclear whether there was an eddy and what its impacts might be.[24] The ALJs noted that an eddy "could enhance mixing, but alternatively, [] it could trap organisms and lengthen exposure times."[25] Despite the ALJs' acknowledgment of uncertainty, there is no attempt in the record to reconcile the impacts of this eddy. This uncertainty is fatal to the permit.

47. **Bathymetry, Critical Conditions, and Margin of Error**: A critical factor in analyzing the impacts of a discharge under the CWA is to model the worst case conditions for such discharge. In this case, the ED failed to do that and the TCEQ did not base the permit determination on the worst case scenario conditions. Even the ALJs noted that the critical conditions used by the ED in the modeling analysis were not the worst-case scenario for salinity and that this "calls into question whether the critical conditions derived from the modeling are protective of aquatic life with respect to salinity."[26] In other words, for this first-of-its-kind facility, where salinity is the constituent of concern, we know the ED ignored the modeling results specifically for salinity in setting the Permit Limit. That does not create merely a "question." If the modeling cannot provide the worst-case scenario for salinity, or if the ED cannot or will not correctly interpret the modeling, the result is the same: the modeling, either by design or because of improper utilization, **is not**

[22] *Id*.

[23] Remand PFD at 26.

[24] Remand PFD at 38-39.

[25] *Id*.

[26] Remand PFD at 40.

protective of water quality. But it gets worse, because this problem is compounded by two other findings by the ALJs. The Remand PFD states that the site-specific bathymetry – the outcroppings (the "cove") and the 90' hole – "introduce *some uncertainty* into the CORMIX modeling results."[27] Said more plainly, when CORMIX predicts 14.6% effluent at the edge of the ZID, we have no idea how close that is to the real world mixing that will occur. Does "some uncertainty" mean that maybe, under some conditions, it will really be 20%? Or 40%? Or 60%?

48. Finally, CORMIX has a 50% margin of error, meaning that when the modeling predicts 14.6% effluent at the edge of the ZID, in reality that may end up being as high as 21.9%.[28] Perhaps rarely. Perhaps all day, every day. Unfortunately, there is no way to know whether the discharge actually meets the effluent percentage limits at the mixing zone boundaries. As the ALJs have already pointed out, those effluent percentage limits are solely based on the CORMIX model outputs, not on actual measurements of effluent at the mixing zone boundaries. Despite knowing that the effluent percentage limits can never actually be measured, the ED argues that the permit "does not authorize the exceedance of the modeled effluent percentages when they are used to set permit limits."[29] In other words, when the Port's desalination facility discharges up to 110 million gallons a day of hyper-saline brine into the Corpus Christi Ship Channel, despite the inability to actually measure effluent percentages at the mixing zone boundaries, all these modeling uncertainties, and the 50% CORMIX margin of error, the Port and the ED would have one believe that there will not be 21.9% effluent at the edge of the ZID, simply because the permit says so. This is unsupported by the evidentiary record.

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[27] Remand PFD at 39.

[28] Remand PFD at 34. Plaintiff does not dispute that CORMIX provides a good model in general. The problem is that in this case neither the Port nor the ED made appropriate inputs nor accounted for the characteristics of it in such a way as to produce reliable results.

[29] Remand PFD at 40.

49. Plaintiff's substantial rights were prejudiced by this error. The incorrect modeling does not justify a finding that the permit is protective of aquatic life and recreational uses of the receiving waters. Jeopardizing these uses impairs Plaintiff's members' right to fish in navigable waters, and the right to fish as granted under the Texas Constitution. *Diversion Lake Club v. Heath*, 58 S.W.2d 566, 570 (Tex. Civ. App. – Austin 1933), *aff'd*, 86 S.W.2d 441 (Tex. 1935); Texas Constitution Article I, Section 34.

D. Error No. 4: The Executive Director's Antidegradation Review Was Not Accurate or Reliable and Did Not Comport with the Law.

50. As part of its evaluation of the permit application, TCEQ is required to conduct an antidegradation review. The Tier 1 antidegradation review requires that "[e]xisting uses and water quality sufficient to protect those existing uses must be maintained."[30] The Tier 2 antidegradation review requires that no discharge may be authorized if the discharge would cause degradation of waters that exceed fishable/swimmable quality unless it can be shown to the Commission's satisfaction that the lowering of water quality is necessary for important economic or social development.[31] For purposes of this requirement, "[d]egradation 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."[32] Perennial bays and estuaries are presumed to be fishable/swimmable,[33] and are thus subject to a Tier 2 antidegradation review if a discharge will result in degradation.

51. Neither the Executive Director, the ALJs, nor the Commission made any finding that the degradation caused by the permitted discharge is necessary for important economic or social development. Rather, issuance of the permit is premised upon the Executive Director's

[30] Remand PFD 41; 30 TAC § 307.5(b)(1).

[31] 30 TAC § 307.5(b)(2).

[32] *Id.*

[33] 30 TAC § 307.4(h)(3), (j)(2)(A).

antidegradation review concluding that the lowering of water quality as a result of the authorized discharge would be less than *de minimis*.

52. This case was remanded so the ALJs could take additional evidence on whether the ED's antidegradation review *was* accurate. No such evidence was presented. Instead, the ED tossed out its original antidegradation review, replaced the antidegradation reviewer, and conducted a new and different review of a new application.[34] One step in this new review process "was to assign critical conditions for the outfall location" – ironically, these are the same critical conditions that the Remand PFD states are not the worst-case scenario for salinity.[35]

53. The ED's new antidegradation review was performed by Mr. Peter Schaefer, an aquatic scientist at TCEQ, and the Team Leader of the Standards Implementation Team.[36] Despite his experience and position, at the hearing, Mr. Schaefer demonstrated a complete inability to describe his antidegradation review in any meaningful way. He could not define "salinity gradient" (which is a critical element to the analysis of the impact on water quality in this case), nor could he define "*de minimis*." These are the two key terms essential in this case to the antidegradation review under the applicable law, and he could provide no definition whatsoever for them. He could not even provide his own plain-English definition of the standard that he was tasked with enforcing. When asked in the comfort of his own office, "What is the definition of *de minimis*?" he replied, "*De minimis* is not defined by the Texas Water Code, the Texas Administrative Code or the Implementation Procedures (IPs)."[37] This non-answer implied what he more explicitly

[34] Remand PFD at 53.

[35] Remand PFD at 40, 42.

[36] Remand PFD at 42.

[37] Ex. ED-PS-1-Remand at 24:28-30.

stated live at hearing when he was asked, "Do you have a definition of *de minimis* that you used in your review?" He answered, "No. I don't."[38] He was simply unable to define the very standard that, in his expert opinion, the Port had clearly met.

54. TCEQ's Water Quality Standards provide that, "Salinity gradients in estuaries must be maintained to support attainable estuarine dependent aquatic life uses." Thus, the applicability of a full Tier 2 review in this case turned on whether the salinity gradient would be impacted in a way that would lower water quality by more than a *de minimis* amount. Of course, this requires understanding the meaning of the term "salinity gradient" as that term is used in the TCEQ rules.

55. Mr. Schaefer's testimony regarding the definition of "salinity gradient" is slightly less stark than his testimony regarding the definition of "*de minimis*." Although he had earlier been deposed regarding his definition of this term, he offered no prefiled direct testimony regarding it. In hearing, he said, "I don't know the precise definition, no, sir."[39] He also acknowledged not knowing if the time over which the change in salinity occurs was a component of the definition.[40] If one does not know whether a gradient is measured over time or is measured over distance, it is a stretch to find that that person has even a general understanding of the "gradient" concept embodied in the TSWQS. Mr. Schaefer's counsel did not explore his understanding of either term in re-direct examination.

56. Incongruously, "he indicated that by following the IPs' guidance, he can ensure no more than *de minimis* degradation."[41] Then he described the steps he took to follow the IPs. In

[38] Remand Hearing Tr. Vol. 9 at 2384:9-11.

[39] Remand Hearing Tr. Vol. 9 at 2349:21.

[40] Remand Hearing Tr. Vol. 9 at 2350:5-6.

[41] Remand PFD at 47. The IPs do not contain the terms "*de minimis*" or "salinity gradient." The IPs have never before been used to evaluate a permit for discharge from a marine desalination facility.

other words, he had a recipe – and he followed it. Mr. Schaefer is worth quoting at some length because his testimony demonstrates the ad hoc nature of his approach and that, contrary to the Remand PFD,[42] he *did not* consider the only existing actual testing data to show the impacts of salinity on aquatic life—Dr. Kristin Nielsen's data:

> A. Okay. So like I said, it started out looking at the Texas Water Development Board paper and that *gave me an idea*, okay, so what's a tolerance for organisms that are going to be found in this area, red drum, which everyone has been talking about, stood out, and looking at the – *the optimal range that was given in that of 20 to 35 ppt*, I've calculated the effluent percentage at *the edge of the mixing zone*. It was within that – that level, and then, of course, looking at the SUNTANS modeling, the WET data results, and then the additional information that this hearing has brought out has kind of fallen in line like the Nielsen – *of course, I didn't use that in my initial review* but the Nielsen data on the red drum, that sort of falls into place with the water development board results and kind of gives me more assurance that *at the edge of that aquatic life mixing zone, we're going to be within that range of tolerance for those, the red drum*. Looking for areas within the ZID, within the mixing zone, that's where the whole effluent toxicity data comes into play.
>
> Q. Understood. So at the edge of the aquatic life mixing zone, I believe that you used an 8.9 percent effluent – an effluent –
>
> A. Percentage?
>
> Q. Percentage. Thank you, sir. Is that accurate?
>
> A. That is correct.
>
> Q. And where did you get that number from?
>
> A. From the critical conditions memo.[43]

57. So his "process" was actually as follows: Mr. Schaefer looked at the TWDB paper and found that it says the "optimal range" of salinity for red drum is 20-35 ppt. Except that is

[42] Remand PFD at 47 (listing consideration of Dr. Nielsen's data as part of Mr. Schaefer's "process" without citation to the record).

[43] Remand Hearing Tr. Vol. 9 at 2384:20 - 2385:24. (Emphasis added).

incorrect. The TWDB paper does not use the word "optimal" with respect to red drum at all. It states that red drum survived from hatching to two weeks and grew equally well in 15-30 ppt water.[44] And Figure 24 provides the range of salinity that will result in "no salinity related mortality during the pelagic larval stage." For red drum the upper limit is not 35; it is 33 ppt.[45] So, one of his initial considerations was simply wrong.

58. Mr. Schaefer says that he then calculated the effluent at the edge of the mixing zone at 8.9% effluent. He did no such calculation – that 8.9% is the CORMIX result produced by Ms. Katie Cunningham and the Port. He testified that if those results were not accurate, he would want to "revisit" his antidegradation review.[46] Well, as the Remand PFD states, those results are in fact unreliable. Of course, Mr. Schaefer could not have known that – or accounted for the inability to model for the site-specific bathymetry, the failure to use the worst case scenario in developing the critical conditions, and the CORMIX margin of error – when he performed his review. And he does not claim he did. He simply accepted the CORMIX results as gospel.

59. Next Mr. Schaefer "looked" at the SUNTANS modeling – which was prepared for the first hearing and not redone with the new application information. This is the model that capped each cell's salinity increase at 1% above ambient cell salinity, that schematized the ship channel very differently from the actual geometry of the channel, and for which "it is not possible to develop quantitative metrics for assessing the SUNTANS model's performance,"[47] i.e., to validate

[44] Ex. PAC-85R at 55 (Bates Port Authority 041392).

[45] Ex. PAC-85R at Fig. 24 (Bates Port Authority 041408).

[46] Remand Hearing Tr. Vol. 9 at 2386:3-6.

[47] Ex. APP-JF-13 and Ex. APP-JF-1 at 15:7-8. Additionally, there is only one reference point against which to judge the SUNTANS model's ability to reflect salinity changes over time, and that reference point is not in the Bay but, rather, is in Aransas Pass, almost in the Gulf of Mexico. *See* Ex. APP-JF-13, Figure 1 and related text.

its results quantitatively. Reliance on this data, which was not updated for the revised application, was clearly erroneous.

60. Mr. Schaefer also relied on Dr. Jordan Furnans' salt-flux analysis. However, the salt-flux analysis prepared by Dr. Furnans contained a massive calculation error, resulting in a mathematical input that was wrong by a factor of 10. This error was noted in briefing, the exceptions to the Remand PFD, and the motion for rehearing. The Remand PFD diverts attention from the salt-flux-analysis on which Mr. Schaefer relied by shifting the burden from the Port and the agency to Protestants, stating: "no one questioned Dr. Furnans or any other witness about it. Nor did PAC offer other exhibits explaining this error or offering a different analysis."[48] But this discussion wholly misses the point. The Port's error is clearly in the evidentiary record and means that the salt flux data was completely unreliable for any purpose, including reliance by Mr. Schaefer in his antidegradation review.

61. Further, the ALJs opined, with no record support, that the increase represented by the modeling "does not seem" to result in degradation and "would not necessarily raise the salinity level of the receiving water to an alarming level."[49] Neither of these is the correct legal standard the Port is required to meet. Lay persons guessing about degradation and the mere possibility that salinity levels would not be raised above "alarming levels" is not sufficient to demonstrate that no degradation has occurred. Under the clearly applicable legal standards, a lowering of water quality need not reach an "alarming level" to be greater than "*de minimis*."

62. The Remand PFD states that the unwritten process used by Mr. Schaefer was not "too vague" because he began to explain it but "was cut off . . . the questioning went in a different

[48] Remand PFD at 51.

[49] Remand PFD at 51.

direction."[50] The Remand PFD concludes that Mr. Schaefer "did not get the opportunity to finish that discussion."[51] This is remarkable. The ALJs control the proceeding, not the parties. Again, the ALJs shifted the responsibility to PAC for things that the law and the process do not place upon PAC. Once Mr. Schaefer's review was shown lacking, it was the ED's responsibility to defend the antidegradation review and ad hoc weight of the evidence "process." After Mr. Schaefer was "cut off" during cross examination, the ED's counsel took him on re-direct and elected to not create any record at all of what constitutes an adequate weight of the evidence review.[52]

63. The antidegradation review was no real review at all, and the decision to rubberstamp it as adequate reflects a desire to simply push this permit along rather than ensure that it satisfied all applicable standards and will be protective of aquatic life. Without reliable evidence and a defensible antidegradation analysis, the Revised Draft Permit has not been shown to satisfy the applicable standards and TCEQ's issuance of it was error. EPA has recognized this in objecting to the permit and noting that it is not a valid permit under the CWA.

64. Plaintiff's substantial rights were prejudiced by this error. The total absence of a proper antidegradation review, and reliance on incorrect modeling, does not justify a finding that the permit is protective of aquatic life and recreational uses of the receiving waters. Jeopardizing these uses impairs Plaintiff's members' right to fish in navigable waters, and the right to fish as granted under the Texas Constitution. *Diversion Lake Club v. Heath,* 58 S.W.2d 566, 570 (Tex. Civ. App. – Austin 1933), *aff'd*, 86 S.W.2d 441 (Tex. 1935); Texas Constitution Article I, Section 34.

[50] Remand PFD at 49.

[51] Remand PFD at 49.

[52] Remand Hearing Tr. Vol. 9 at 2387-91 (Re-Direct examination of Mr. Schaefer by ED).

E. Error No. 5: TCEQ Improperly Ignored that the Proposed Discharge Will Adversely Impact the Marine Environment, Aquatic Life, and Wildlife, Including Birds and Endangered or Threatened Species, Spawning Eggs, or Larval Migration.

65. The ALJs recognized that the place where this discharge is proposed—the Corpus Christi Ship Channel ("CCSC")—plays an important role in sustaining populations of estuarine-dependent marine species and is an environmentally and ecologically sensitive area.[53] High salinity or saline imbalances can be fatal to aquatic life, particularly the early life stages that will pass through the ZID.[54] Given the sensitive nature of the area, one would think the review would be particularly careful and the evidence should clearly show no harm before a permit would be issued by TCEQ. But you would be wrong.

66. The ALJs concluded that the preponderance of the evidence did not demonstrate the Draft Permit would ensure compliance with the TSWQS. That is worth restating and emphasizing: **on remand, the ALJs found that the preponderance of the evidence did not demonstrate the Draft Permit would ensure compliance with the TSWQS**. Amazingly, the ALJs still recommended approval of the permit. How can this be? Because they concluded that a permit limit that had not been analyzed and evaluated through modeling would somehow fix the problem for which the Port had not carried its burden of proof.

67. The ALJs continually went outside the record to try to fix the problems with the inadequate evidence and evaluation presented by the Port and the ED. Acknowledging uncertainty in the evidence, the ALJs concluded, without evidentiary support, that exposure would be no more than "seconds and minutes."[55] But even if this was wrong, the ALJs appeared to believe that the WET testing required by the Draft Permit and an additionally imposed permit limit on salinity

[53] Remand PFD at 84.

[54] Remand PFD at 84.

[55] Remand PFD at 88.

would be an insurance policy that would protect against potential harm from the discharge. But, this is wrong.

68. First, in regard to WET testing, the 24-hour acute testing requires "greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period."[56] This requirement means the Facility could operate for months, degrading water quality and causing significant lethality, before the testing would reveal that. Thus, WET Testing is not an insurance policy against harm. It will only show it after it has occurred.

69. Further, the WET Testing will not address impacts to the species most likely to be harmed—red drum, which are more sensitive than the species tested by WET testing, particularly in the early life stages.[57] The only person to test red drum larvae, and the only person to test for the impacts of a salinity concentration of 100 percent effluent (as required by the Draft Permit), is Dr. Kristin Nielsen. She presented test results (her LT50 testing) showing that, when exposed to 100% effluent, larvae spawned at 28 ppt began dying after only 4 minutes, and half were dead after 48 minutes.[58] Similarly, when exposed to 100% effluent, larvae spawned at 35 ppt began dying after 10 minutes, and half were dead after 55.4 minutes.[59] The ALJs found that testing reliable.[60] So, while we do not have comparable results for the Port's test species (because it only tested salinities up to 55 ppt – substantially lower than the 68.7 ppt of 100 percent effluent), it is clear the Facility would "fail" the required 24-hour acute test if red drum were used. We know that. Today. But TCEQ wholly ignored this when issuing the permit.

[56] Admin. Record Tab K at Page 31 (Bates 00031).

[57] Remand PFD at 85.

[58] Remand PFD at 59-60.

[59] Remand PFD at 60.

[60] Remand PFD at 86.

70. In a Texas Parks and Wildlife Department ("TPWD") study, red drum larvae of different ages, ranging from 1-day to 9-days, were subjected to 18-hour salinity tolerance tests with concentrations ranging from 0 ppt to 50 ppt.[61] For every age, mortality was much greater than 50% at 48 ppt. Thus, the TPWD study showed that salinity far less than required for the Draft Permit's acute testing, killed far more than half the subjects, well before the 24 hour mark. The "best" result at 50 ppt was for 5-day old red drum, with a 4.76% survival rate.[62] We do not need to look into a gazing ball. We have the data that tells us what the WET test results would be, if it were performed competently, using red drum. We know that. Today. But TCEQ wholly ignored this as well when issuing the permit.

71. The PFD acknowledges these facts in a rather understated way: "the evidence shows that some mortality could occur due to abrupt changes in salinity."[63] Mr. Schaefer relied on the TPWD study for his "optimal salinity level." Dr. Fontenot relied heavily on the TPWD study for his Effects Assessment Exhibits – he relied on that study exclusively for the salinity tolerance range of red drum larvae in Exhibit EFA 1-1. Yet there is no analysis at all nor any attempt to explain how mortality of more than 95% for all ages of red drum larvae[64] exposed to 50 ppt in the 18-hour test would not be "significant lethality."

72. Ultimately the ALJs concluded that the preponderance of the evidence did not demonstrate the Draft Permit would ensure compliance with the TSWQS.[65] To remedy this failure,

[61] Ex. PAC-85R at 62, Table 12 (Bates Port Authority 041399).

[62] Ex. PAC-85R at 62, Table 12 (Bates Port Authority 041399).

[63] Remand PFD at 89.

[64] That is 100% for larvae age 1-day, 3-days, and 9-days.

[65] Remand PFD at 89.

the ALJs proposed a limit on salinity.[66] The ALJs note that "[t]he question is what limit is appropriate."[67] To arrive at their recommendation, the ALJs simply surveyed the parties' various proposals.

73. The Port cited to other state and international standards. But simply lifting any standard from some other jurisdiction ignores the fact that those standards are not tailored to ***this*** marine environment and the aquatic life found ***here***. It ignores the site specific conditions. While the record contains some evidence regarding marine desalination facilities outside Texas, ***none*** of them discharge in a similar location – in proximity to a pass that links a bay to an estuary.

74. The ALJs agreed that there were numerous deficiencies and uncertainties – for example, regarding the eddy and the modeling, among others – but proclaim that they are all remedied with a salinity limit. But this one additional term, in isolation, does nothing to make the Draft Permit more protective within 100 meters, within the ZID where marine organisms will contact 100% effluent. Moreover, the Port admits, and the Remand PFD acknowledges, that the proposed facility does not meet this standard for 50% recovery and the 95th percentile salinity.[68]

75. Because the Port failed to meet its burden to prove the Revised Draft Permit would satisfy the TSWQS – because there will be adverse impacts on the marine environment and aquatic organisms – the permit should have been denied. TCEQ erred by approving the Revised Draft Permit in the absence of clear evidence supporting it.

76. Plaintiff's substantial rights were prejudiced by this error. The issuance of a permit that fails to comply with the Texas Surface Water Quality Standards will negatively impact the diversity and abundance of aquatic life in the receiving waters where Plaintiff's members fish and

[66] Remand PFD at 89.

[67] Remand PFD at 90.

[68] Remand PFD at 90.

recreate. This error impairs Plaintiff's members' right to fish in navigable waters, and the right to fish as granted under the Texas Constitution. *Diversion Lake Club v. Heath,* 58 S.W.2d 566, 570 (Tex. Civ. App. – Austin 1933), *aff'd*, 86 S.W.2d 441 (Tex. 1935); Texas Constitution Article I, Section 34.

F. Error No. 6: TCEQ Improperly Ignored that the Proposed Discharge Will Adversely Impact Recreational Activities, Commercial Fishing, or Fisheries in Corpus Christi Bay and the Ship Channel.

77. For all of the same reasons that there will be adverse impacts on the marine environment and aquatic organisms, there will be adverse impacts on recreational activities, commercial fishing, and fisheries. A permit limit of 2.0 ppt at 100 meters from the discharge will do nothing to diminish the significant mortality that will occur within 100 meters of the discharge.

78. Mr. Scott Holt testified (as did others) that during spawning there are 100 red drum larvae per 100 cubic meters of water.[69] The TPWD study leads to a reasonable inference that there could be virtually 100% mortality to red drum larvae exposed to 50 ppt or greater. Thus the preponderance of the evidence shows there will be significant mortality within the ZID, and due to the importance of the CCSC in the life cycle of the red drum and other estuarine dependent species, that mortality will have a material and lasting impact on the recreational and commercial fishing stock within a few years.

79. Plaintiff's substantial rights were prejudiced by this error. The issuance of a permit that fails to protect against adverse impacts to recreational activities, commercial fishing, and fisheries impairs Plaintiff's members' right to fish in navigable waters, and the right to fish as granted under the Texas Constitution. *Diversion Lake Club v. Heath,* 58 S.W.2d 566, 570 (Tex.

[69] Ex. PAC-46R at 13:20-23.

Civ. App. – Austin 1933), *aff'd*, 86 S.W.2d 441 (Tex. 1935); Texas Constitution Article I, Section 34.

G. Error No. 7: TCEQ Improperly Accepted an Incomplete, Inaccurate, and Erroneous Application with False Representations Contained Therein.

80. This matter was remanded for the ALJs to take additional evidence on (1) whether the Application, and representations contained therein, are complete and accurate, and (2) the depth of the channel, site-specific ambient velocity, and the depth of the diffuser.

81. Despite the basis of the remand being to get more accurate data, including on the depth of the channel at the discharge location, the Port amended its application and changed the discharge location. Yet the data for the discharge location was again incorrectly noted in the revised application.

82. The channel depth is an input to the CORMIX model, so this issue is discussed above in connection with Issue G. The ALJs concluded in the original PFD that the channel depth provided in the original application was not accurate.[70]

83. At the time the original PFD was written and at the time thatTCEQ remanded for more accurate data, everyone understood and agreed that "the channel depth at the outfall location" actually meant the channel depth at the location where the Port told the world it intended to install the outfall. But on remand that simple, basic concept was turned on its head.

84. The depth of the channel and depth of the diffuser should not be matters of opinion; they are verifiable facts that were supposed to be corrected definitively on remand. The original PFD correctly observed that 63 feet is not 90 feet. Easy.

[70] Feb. 5, 2021 PFD at 78.

85. ED witness Katie Cunningham described the problem on remand clearly and succinctly in her testimony. The June 24, 2021 memo from Dr. Tischler states that the depth at the discharge location is approximately 90 feet. But the depth of the diffuser barrel, as depicted in the bathymetry map included with that memo, is 65 feet.[71]

86. But instead of saying, again – 65 feet is not 90 feet – the Remand PFD provides that "both the ED and the Port Authority *agree* that the outfall will discharge 64 or 65 feet below the surface and would be within 68 to 70 feet of water on four-to-six feet risers."[72] That still contradicts the Figure 1 bathymetry map submitted with the New Application.[73] That map shows the Proposed Discharge Location at a spot between two depths: 65.0 and 63.4 feet. Depths of 68 and 70 feet are not reflected anywhere near that proposed location. But now we have a new standard. Correct and verifiable facts need not actually be contained in the Application and supported with data. The Applicant and ED only need to *agree* – "that the world is flat, that the moon is made of green cheese, or that the Earth is the center of the solar system."[74]

87. The Remand PFD tells us that now the ALJs agree that the diffuser barrel will be put in an area within 68 to 70 feet depth[75] – and also that "this area will be *in front of* the 90-foot depression."[76] The bathymetry map does not actually show a 90 foot depth anywhere. According to the Port's bathymetry map, "this area will be in front of" depths of 81.7 feet, 95.1 feet, 88.2 feet, 68.0 feet, and 60.7 feet. Why aren't any of those the "correct" depth? Apparently because the Port

[71] Remand PFD at 96; Ex. ED-KC-1 Remand at 0008.

[72] Remand PFD at 97.

[73] Remand PFD at 97; AR-R 4 Admin. Record – Remand Tab I at Figure 1 Diffuser Location (Bates 00254).

[74] *E.I. du Pont de Nemours & Co. v. Robinson*, 923 S.W.2d 549, 558 (Tex. 1995).

[75] Remand PFD at 97.

[76] Remand PFD at 97.

and ED "agree" they are not. The effluent will discharge in that southerly direction during the supposedly infrequent and brief slack tides.[77] The effluent will flow east and west during much more frequent incoming and outgoing tides, and depths in those directions range from 45.5 feet to 78.3 feet. Why aren't any of those the "correct" depth? Apparently because the Port and ED simply "agree" they are not.

88. How were Protestants and their experts to know the "correct" depth when they conducted their modeling? Apparently, they weren't. They had to sit tight for the big reveal, when the Port submitted rebuttal testimony. This really begs the question – why "require" the Application to be correct, or have a hearing at all if the Applicant and ED can simply "agree" to a set of facts that contradict the facts contained in the Application and supporting materials? And that also contradict the facts presented in written discovery and depositions. One thing is very clear: the location of the discharge has been identified as 90 feet in the Application, yet now everyone agrees it is actually in a location where the depth is somewhere between 65 and 70 feet. This is a fact. The revised application is wrong. Yet, apparently facts do not matter and one of the reasons TCEQ remanded to the ALJs has now been disregarded as irrelevant. The revised application is not accurate and TCEQ erred in granting a permit based on it.

89. Plaintiff's substantial rights were prejudiced by this error. The issuance of a permit based on incorrect information fails to ensure protection against adverse impacts upon aquatic life, which impairs Plaintiff's members' right to fish in navigable waters, and the right to fish as granted under the Texas Constitution. *Diversion Lake Club v. Heath*, 58 S.W.2d 566, 570 (Tex. Civ. App. – Austin 1933), *aff'd*, 86 S.W.2d 441 (Tex. 1935); Texas Constitution Article I, Section 34. This alteration of facts through the process further violated Plaintiff's members' statutory and

[77] Remand PFD at 70.

constitutional due process rights, as it impaired Plaintiff's opportunity to present evidence and argument on each issue in the case, and allowing changes in the application that resulted in a fundamentally unfair process. Tex. Gov't Code § 2001.051(2); *Oncor Electric Delivery Company, LLC v. Public Utility Commission of Texas*, 406 S.W.3d 253, 268-269 (Tex. 2013).

H. Error No. 8: The Remand Proceeding Exceeded the Clear Scope of TCEQ's Remand Order.

90. Under the rules, TCEQ "may order the judge to reopen the record for further proceedings on *specific* issues in dispute."[78] If TCEQ does this, its order "shall include instructions as to *the subject matter* of further proceedings and the judge's duties in preparing supplemental materials or revised orders based upon those proceedings."[79] Therefore, the scope of the remand is defined, and limited, by TCEQ in its order reopening the record.

91. In its Remand Order, TCEQ identified two purposes for the Remand: (1) for the ALJs to apply a different legal standard for evaluating non-numeric criteria; and (2) for the ALJs to "take additional evidence on" the following issues:

- Whether the *proposed* discharge will adversely impact the marine environment, aquatic life, and wildlife, including birds and endangered or threatened species, spawning eggs, or larval migration;
- Whether the *proposed* discharge will adversely impact recreational activities, commercial fishing, or fisheries in Corpus Christi Bay and the ship channel;
- Whether *the* Application, and representations contained therein, are complete and accurate;
- Whether *the* modeling complies with applicable regulations to ensure *the* Draft Permit is protective of water quality, including utilizing accurate inputs;

[78] 30 TAC § 80.265. (Emphasis added).

[79] 30 TAC § 80.265. (Emphasis added).

- Whether the Executive Director's antidegradation review *was* accurate;
- Whether *the* Draft Permit includes all appropriate and necessary requirements; and[80]
- The depth of the channel, *site-specific* ambient velocity, and the depth of the diffuser.[81]

92. As a matter of simple grammar, it is clear that the Remand Order references *the* Application, and *the* Draft Permit, as they existed at the time the Order was issued. For example, the ALJs were tasked with taking additional evidence to determine whether the Application was complete and accurate – not to take evidence on what types of changes to the Application could support "some" Draft Permit that did not yet even exist. By using the past tense, TCEQ made it clear the ALJs were to receive evidence that the ED's *original* antidegradation review had satisfied the law. But no one offered additional evidence to support the original Application, modeling, antidegradation review, or Draft Permit, or to answer the ALJs' questions and concerns expressed in the original PFD. Instead the Port ignored the Remand Order and changed the discharge location, effectively submitting a new application.

93. The Port presented voluminous new evidence in support of a *new* Application for a *new* discharge location (thus *new* site-specific conditions), including all *new* modeling. The ED performed a *new* antidegradation review (by a *new* witness) and issued a *new* Draft Permit. The ALJs convened a 2022 merits hearing that was twice as long at the 2020 merits hearing (10 days compared to 5) – to accommodate more than double the number of witnesses that the Port presented (8 compared to 3). This is clearly not what Chairman Niermann had in mind for the Remand, when he stated during an open meeting:

[80] Interim Order at 1-2, Paragraph I (May 26, 2021). (Emphasis added).

[81] Interim Order at 2, Paragraph II (May 26, 2021). (Emphasis added).

> *I do though think that the process is working* in that the protestants have raised legitimate questions about the protectiveness of *the proposed authorization*, and now those questions can be addressed.
>
> * * *
>
> And I appreciate *the burden this matter has already placed on all of the parties*, but in my view, the weight of the equities and the better policy is to remand the matter so that we can determine whether *the proposed authorization* is indeed protective, based on more precise data inputs. And so that's, that's what I would propose.[82]

94. The Chairman clearly expected, and TCEQ ordered, that the Port could submit additional evidence to provide greater clarity regarding the subjects addressed in the Initial Proceeding and PFD. Nothing said at TCEQ's open meeting, or in the Remand Order, would have led anyone to reasonably expect that the Remand would involve 25 new depositions, and a merits hearing twice as long as the original. Talk about a burden.

95. Perhaps at that open meeting the Port actually did intend to provide supplemental data to support its existing Application, when its counsel said "The ALJs disagreed and they wanted more specific data. That's the type of data that we think we can provide that will show that *being deeper* and having more current enhances the mixing and provides more protection for Marine life and the environment."[83] But the Port certainly thumbed its nose at Chairman Niermann's concept of the process "working" when it moved the outfall to a location where the water is approximately 30 feet *shallower* than in its Original Application. In 2020 the ED told the world that such a revision would send the Port back to square one, when its witness testified under oath:

[82] Certified Transcription May 19, 2021 TCEQ open meeting at 49:19-23, 51:4-10.

[83] Certified Transcription May 19, 2021 TCEQ open meeting at 46:15-19. (Emphasis added).

> I believe that would require a whole new application. I would need to double-check. But because our reviews are site specific, if they move the outfall, that would, basically, be going back to the beginning.[84]

96. In contradiction of that sworn testimony and statements made at TCEQ's open meeting, the "*proposed* authorization" the Chairman spoke of was wholly shredded. Internally, the Port actually did go back to square one, but it got the procedural benefit of skipping the pesky requirements that come with a new application, like new public notice and comments from other regulatory agencies. The ED allowed this improper procedure, and just conducted all new modeling, performed a new antidegradation review, and issued the new Draft Permit.

97. PAC timely raised the issue with the ALJs and requested that a question be certified to TCEQ in order to clarify the scope of the remand, but the ALJs denied that request – **effectively determining that the Commissioners *do not* determine the scope of any remand, but rather the parties do.** This violates TCEQ's rules regarding remands, which mandate that the TCEQ define and limit the scope of the remand.[85]

98. The Sunset Commission recently described the TCEQ Commissioners as "reluctant regulators. . . . delegating much of the initial decision making to staff and, to a certain extent, encouraging industry members to self-govern and self-police."[86] The Port, for one, is delighted to self-govern and self-police. This case presented an opportunity for the Commissioners to demonstrate that they actually take ownership of their own orders and are willing to meaningfully enforce them, yet they improperly allowed the Port to go beyond the scope of the remand order. TCEQ's issuance of the Revised Draft Permit on the new application violates TCEQ's rules,

[84] Original Hearing Tr. Vol. 5 at 70:7-12 (ED witness Shannon Gibson at the 2020 merits hearing).

[85] 30 TAC § 80.265.

[86] Sunset Advisory Commission Staff Report, TCEQ, 2022-23 88th Legislature at 1.

because the scope of the remand did not allow the Port to submit what is, in reality, an entirely new application.

99. An agency is bound to follow its own rules.[87] If an agency wishes to change its rules, it must follow the rulemaking procedures of the Administrative Procedures Act ("APA") to modify the rule.[88] It cannot simply disregard the rule in circumstances where the rule plainly applies and guides TCEQ's analysis. As the Texas Supreme Court has noted, "If the Commission does not follow the clear, unambiguous language of its own regulation, we reverse its action as arbitrary and capricious."[89]

100. Here, TCEQ was required to identify the scope of the remand in its order remanding the case. It did so and that scope limited and defined the proceedings that could occur at the State Office of Administrative Hearings. By allowing the proceedings to far exceed the scope of the remand order, TCEQ violated its own rules and committed clear error.

101. Plaintiff's substantial rights were prejudiced by this error. The constant shifting of the application violated Plaintiff's members' statutory and constitutional due process rights, as it impaired Plaintiff's opportunity to present evidence and argument on each issue in the case, and resulted in a fundamentally unfair process. Tex. Gov't Code § 2001.051(2); *Oncor Electric*

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[87] *Flores v. Employees Ret. Sys. of Tex.*, 74 S.W.3d 532, 542 (Tex. App.—Austin 2002, pet. denied); *Southern Clay Prods., Inc. v. Bullock*, 753 S.W.2d 781, 783 (Tex. App.—Austin 1988, no writ) (citing *Gulf Land Co. v. Atlantic Ref. Co*., 134 Tex. 59, 131 S.W.2d 73, 79 (Tex. 1939)).

[88] *Myers v. State*, 169 S.W.3d 731, 734 (Tex. App.—Austin 2005, no pet.) ("Allowing an agency to create broad amendments to its rules through adjudication, rather than through its rule making authority, effectively undercuts the Administrative Procedures Act.") ("If an agency does not follow the unambiguous language of its own rules, we must consider its actions arbitrary and capricious.").

[89] *Rodriguez v. Service Lloyds Ins. Co.*, 997 S.W.2d 248, 254–255 (Tex. 1999); *see also Bexar Metro. Water Dist. v. Tex. Comm'n on Envtl. Quality*, 185 S.W.3d 546, 551 (Tex. App.—Austin 2006, pet. denied) ("A reviewing court will reverse an agency when it fails to follow the clear, unambiguous language of its own regulations, that is, when its actions are arbitrary and capricious.").

Delivery Company, LLC v. Public Utility Commission of Texas, 406 S.W.3d 253, 268-269 (Tex. 2013).

I. Error No. 9: TCEQ Included a Monitoring Plan in the Revised Draft Permit that is Not Supported by Any Evidence in the Record.

102. In their PFD on remand, the ALJs found that a salinity limit of 2 ppt over ambient at 100 meters was necessary for the permit to meet regulatory requirements for the protection against adverse impacts upon uses of the receiving waters, including fisheries.[90] The Commission's Final Order adopted this finding, stating that, "[i]ncluding a salinity limit in the permit of 2.0 ppt over ambient to be measured at 100 meters from the outfall **is necessary** and appropriate to protect aquatic organisms that will be exposed to the proposed discharge."[91] To enable a determination of compliance with this necessary requirement, the ALJ's premised their conclusion that water quality rules would be met upon a finding that the "permit require a monitoring plan" for the 2.0 ppt limit on salinity increases.[92] The ALJs also stated, "the Port Authority agrees to work with TCEQ staff to develop" such a plan.[93] The evidentiary record, however, contained no testimony or evidence to establish what should be included in any monitoring plan. In fact, both experts for Protestants and the Port testified that they could evaluate such a plan, if one had been proposed. Despite the clear recommendations of the General Land Office and TPWD for the salinity limit and effective monitoring, the Port did not include one in its application and the ED did not include one in either of its Draft Permits. No one—not the parties or TPWD—has had any opportunity to evaluate the monitoring plan that the ALJs recommended be a required part of the permit.

[90] Remand PFD at 93, 104; Remand Proposed Order at 12, Remand Proposed Finding of Fact 102.

[91] Final Order at 11, Finding of Fact 102.

[92] Remand Proposed Order at 13, Remand Proposed Finding of Fact 122.

[93] Remand PFD at 38-39.

103. Thus, in light of the ALJs' recommendation, TCEQ could have remanded this matter back to the ALJs to take additional evidence regarding the necessary requirements for any effective monitoring plan. Instead, it appears that TCEQ unilaterally developed a monitoring plan outside of the contested case hearing process and included such monitoring plan as key elements of the Revised Draft Permit. This was error, as there is no evidence to support these elements of the Revised Draft Permit. Texas Government Code § 2003.047(m) provides that TCEQ's order in a contested case "shall be based solely on the record made before the administrative law judge." Thus, in adopting a monitoring plan apart from any evidentiary basis, TCEQ violated this statute.[94]

104. Moreover, the plan does not take into consideration the complexity of the site or the facts in the record, and will not even do what the ALJs recommend, i.e. monitor to determine if there are any increases in salinity over ambient as much as 2 ppt at 100 meters from the discharge. For example, the plume will never get to the location proposed for measuring the ebb tide plume. There is a bathymetric feature, a shoulder or side of a cove, that juts out from Harbor Island within 100 meters and blocks the dense plume from moving to the ebb tide monitoring location. The dense saline plume will fall as it moves with the ebb tide and it cannot then climb over the shoulder. Instead, the shoulder will divert the plume toward the middle of the channel.[95]

105. There is no evidence in the record on how much the plume will be diverted toward the center of the channel during the major periods of ebb tide as the momentum of the plume moves it further toward the middle of the channel while the tide drops. The plume will swing from outgoing to flowing toward the middle of the channel and then swing toward Corpus Christi and

[94] Because it is not clear at all how TCEQ developed the monitoring plan and these additional elements of the Revised Draft Permit, it also raises the question of whether a violation of Tex. Gov't Code § 2001.061 has occurred. Plaintiff anticipates requesting discovery to explore this potential procedural and due process error.

[95] Ex. PAC 51R-SS6.

back again during one cycle of the tides. There is no evidence in the record on a proper location for monitoring the plume. That work has never been done, but needs to be done for there to be an effective monitoring plan. The experts and all parties have a right to review and comment on any supporting basis for these new elements of the Revised Draft Permit, yet they have been given no opportunity to do so.

106. A very similar situation will occur with the flood tide. The bathymetric features that create the problems for monitoring the plume are visible in the Port's maps used in the permit on pages 22-25. The locations of the monitoring locations on the maps are not in the evidentiary record.

107. There are other clear problems with the monitoring plan. The averaging of the monitoring results over time and over channel depth will not identify the maximum increases in salinity for compliance with the 2.0 ppt limit or to validate the modeling. The discharges at 100 meters are still narrow plumes of concentrated brines, with salinity levels that create the risk to the sensitive aquatic species.

108. As noted above, Tex. Gov't Code § 2003.047(m) requires that TCEQ's order in a contested case "be based solely on the record made before the administrative law judge." Thus, by going outside the record to include new provisions in the Revised Draft Permit related to a monitoring plan, TCEQ violated this statutory provision. This is clear error.[96]

109. Plaintiff's rights were substantially prejudiced by this unilateral development of the monitoring plan without a remand to consider evidence on the plan. Plaintiff's use of the area for fishing and recreational purposes depends upon protection of the fisheries in the area. An

[96] To be clear, the Revised Draft Permit needs to have a monitoring plan to address the ALJs' concerns. It would be error for TCEQ to issue the permit without the monitoring plan, in light of the ALJs' determinations. But, the proper action was for TCEQ to reopen the record to take evidence to determine the monitoring plan, not to unilaterally develop it outside of the evidentiary record in violation of the APA.

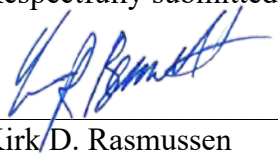
inadequate monitoring plan fails to ensure adequate compliance with the 2.0 ppt salinity limit necessary to protect those uses. By denying Plaintiff the ability to present evidence and argument regarding the sufficiency of the plan, Plaintiff was denied the ability to identify the errors in the plan identified above, and seek development of a plan that was not characterized by these errors. TCEQ's unilateral development of the monitoring plan resulted in a plan that will not ensure achievement of the 2.0 ppt limit, and thereby will not protect fishery uses of the receiving waters, which results in a failure of the permit to protect Plaintiff's uses of the receiving waters.

VIII. CONCLUSION AND PRAYER

110. All conditions precedent to Plaintiff's claim for relief have been performed or have occurred or are legally excused.

111. Plaintiff asks that Defendant be cited to appear and answer herein and that, upon final trial, Plaintiff have judgment from the court providing the following relief: (a) reversing and vacating TCEQ's decision to grant the subject permit, and finding that the agency's decision was arbitrary and capricious, not in accordance with law, marked by procedural or other legal error, contrary to the substantial evidence in the record, taken as a whole, as set out above, and was an abuse of discretion; (b) issuing an order enjoining TCEQ and Applicant from taking actions in reliance on the approved permit, until such time as a new order is entered; and/or (c) granting such further relief at law or in equity as to which Plaintiff may be entitled.

Respectfully submitted,



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Attachment 1 -

Address List for Self-Represented Litigants

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Attachment 2 -

Order Granting the Application of Port of Corpus Christi Authority of Nueces County for TPDES Permit No. WQ0005253000; TCEQ Docket No. 2019-1156-IWD; SOAH Docket No. 582-20-1895

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AN ORDER GRANTING THE APPLICATION OF PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY FOR TPDES PERMIT NO. WQ0005253000; TCEQ DOCKET NO. 2019-1156-IWD; SOAH DOCKET NO. 582-20-1895

On September 22, 2022, the Texas Commission on Environmental Quality (TCEQ or Commission) considered the application of the Port of Corpus Christi Authority of Nueces County for a new Texas Pollutant Discharge Elimination System Permit in Nueces County, Texas. A Proposal for Decision on Remand (PFD) was issued by Rebecca S. Smith and Cassandra Quinn, Administrative Law Judges with the State Office of Administrative Hearings, and considered by the Commission.

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

I. FINDINGS OF FACT

Background

1. The Port of Corpus Christi Authority of Nueces County (Applicant or Port Authority) filed an application (Application) for a new Texas Pollutant Discharge Elimination System (TPDES) permit with TCEQ on March 7, 2018.

2. The Application requests authorization to discharge treated effluent into the Corpus Christi Ship Channel in Nueces County, Texas.

3. TCEQ's Executive Director (ED) declared the Application administratively complete on June 26, 2018.

4. The ED completed the technical review of the Application and prepared a draft permit (Draft Permit).

Notice and Jurisdiction

5. The Notice of Receipt of Application and Intent to Obtain Water Quality Permit (NORI) was published on July 25, 2018, in the *Aransas Pass Progress*, *Ingleside Index*, and *Corpus Christi Caller-Times*. The NORI was also published on July 26, 2018, in the *Port Aransas South Jetty*.

6. The Notice Application and Preliminary Decision (NAPD) was published on November 21, 2018, in the *Aransas Pass Progress* and *Ingleside Index*. The NAPD was also published on November 22, 2018, in the *Port Aransas South Jetty* and *Corpus Christi Caller-Times*.

7. Copies of the Application were placed in La Retama Central Library, Sinton Public Library, Ed and Hazel Richmond Public Library, and the Port Aransas City Hall.

8. A public meeting was held on April 8, 2019, at the Port Aransas Civic Center in Port Aransas, Texas.

9. The public comment period ended at the close of the public meeting.

10. TCEQ received public comments on the Application, and the ED prepared a Response to Comments, which was filed with the Chief Clerk on July 3, 2019.

11. On November 21, 2019, the Commission issued an interim order granting certain hearing requests, referring certain hearing requests to the State Office of Administrative Hearings (SOAH) for an affectedness determination, denying certain hearing requests and requests for reconsideration, and referring the Application to SOAH for a contested evidentiary hearing on the following nine issues:

    A. Whether the proposed discharge will adversely impact: the marine environment, aquatic life, and wildlife, including birds and endangered or threatened species, spawning eggs, or larval migration;

B. Whether the proposed discharge will adversely impact the health of the requesters and their families, including whether fish and other seafood will be safe for human consumption;

C. Whether the proposed discharge will adversely impact recreational activities, commercial fishing, or fisheries in Corpus Christi Bay and the ship channel;

D. Whether the Application, and representations contained therein, are complete and accurate;

E. Whether the Applicant substantially complied with applicable public notice requirements;

F. Whether the draft permit is consistent with the Texas Coastal Management Program's goals and policies;

G. Whether the modeling complies with applicable regulations to ensure the draft permit is protective of water quality, including utilizing accurate inputs;

H. Whether the Executive Director's antidegradation review was accurate; and

I. Whether the draft permit includes all appropriate and necessary requirements.

Proceedings at SOAH

12. The preliminary hearing was initially scheduled to be held in Port Aransas, Texas, on March 24, 2020, but due to the COVID-19 pandemic, was rescheduled and set to convene via Zoom videoconference.

13. Notice of the rescheduled preliminary hearing was mailed by TCEQ on May 28, 2020, and published by the Port Authority in the *Aransas Pass Progress* and *Corpus Christi Caller-Times* on June 3, 2020, and the *Port Aransas South Jetty* on June 4, 2020.

14. The preliminary hearing was held before Administrative Law Judges (ALJs) Rebecca S. Smith and Cassandra Quinn on July 9, 2020, via Zoom videoconference.

15. At the preliminary hearing, the ALJs determined that SOAH had jurisdiction, named parties, and admitted the administrative record into evidence for all purposes.

16. Before the evidentiary hearing, various named parties withdrew. The remaining parties are: the Port Authority; ED; TCEQ's Office of Public Interest Counsel (OPIC); Audubon Texas; Port Aransas Conservancy (PAC); the following individuals represented by counsel: James Harrison King, Tammy King, Edward Steves, and Sam Steves (collectively, represented protestants); and the following individuals representing themselves: Stacey Bartlett, Jo Ellen Krueger, Sarah Searight, Lisa Turcotte, Cara Denney, Aldo Dyer, and Mark Grosse.

17. The evidentiary hearing convened on November 4-6 and 9-10, 2020, via Zoom videoconference, with ALJs Rebecca S. Smith and Cassandra Quinn presiding. All parties participated at the hearing except for Ms. Denney, Mr. Dyer, and Mr. Grosse. The record

closed on January 12, 2021, after the parties submitted written closing arguments and proposed findings of fact and conclusions of law.

18. On February 5, 2021, the ALJs issued a Proposal for Decision (PFD) recommending that the Application be denied.

19. On May 19, 2021, the Commission considered the ALJs' PFD during an open meeting and voted to remand the matter to SOAH for additional proceedings.

20. The Commission issued an Interim Order on May 26, 2021, remanding the case to SOAH for the ALJs to "[a]pply the appropriate legal standard for non-numeric criteria found in 30 Texas Administrative Code § 307.6(e)(1) for evaluating the impacts to aquatic organisms that move through a zone of initial dilution;" and to take additional evidence on the following issues:

    A. Whether the proposed discharge will adversely impact: the marine environment, aquatic life, and wildlife, including birds and endangered or threatened species, spawning eggs, or larval migration;

    C. Whether the proposed discharge will adversely impact recreational activities, commercial fishing, or fisheries in Corpus Christi Bay and the ship channel;

    D. Whether the Application, and representations contained therein, are complete and accurate;

    G. Whether the modeling complies with applicable regulations to ensure the draft permit is protective of water quality, including utilizing accurate inputs;

    H. Whether the Executive Director's antidegradation review was accurate; and

    I. Whether the draft permit includes all appropriate and necessary requirements.

21. The Applicant subsequently submitted a revised application (Revised Application) to change the location of the discharge (outfall), to revise its proposed diffuser design, and to present additional modeling and data, among other things.

22. The ED then prepared a revised draft permit (Revised Draft Permit).

23. On November 10, 2021, the ALJs issued Order No. 16, adopting the parties' agreed procedural schedule on remand for this case.

24. The preliminary hearing on remand was held before ALJs Rebecca S. Smith and Cassandra Quinn on January 25, 2022, via Zoom videoconference.

25. The evidentiary hearing on remand (Remand Hearing) convened on March 14-25, 2022, via Zoom videoconference, with ALJs Rebecca S. Smith and Cassandra Quinn presiding. The record closed on April 22, 2022, after the parties submitted written closing arguments and proposed findings of fact and conclusions of law.

Description of Proposed Facility and Discharge

26. The Port Authority seeks a wastewater discharge permit for a proposed marine seawater desalination plant (the Facility) to be located on Harbor Island in Nueces County, Texas.

27. Harbor Island is situated between the Texas coast and the barrier islands of San Jose Island and Mustang Island, at the mouth of the Aransas Pass inlet, which connects the Gulf of Mexico to Texas's bays and estuaries.

28. The Facility will pump seawater from the Gulf of Mexico and use reverse osmosis to produce potable water.

29. The proposed discharge is for treated effluent from the Facility, consisting primarily of the concentrated brine resulting from the desalination process.

30. If the Revised Draft Permit is issued, the treated effluent will be discharged into the Corpus Christi Ship Channel approximately 229 feet off Harbor Island's shoreline. The outfall location is near the confluence of the Corpus Christi Ship Channel, Lydia Ann Channel, and Aransas Pass inlet.

31. The proposed discharge is to Segment 2481 (Corpus Christi Bay) of the Texas classified surface water segments.

32. The designated uses for Segment 2481 are primary contact recreation, exceptional aquatic life use, and oyster waters.

33. The Port Authority plans to use a diffuser at the discharge site to enhance mixing of the treated effluent with the ambient water.

Texas Surface Water Quality Standards (TSWQS)

34. The TSWQS were developed to protect surface water quality in regards to human health, aquatic life, terrestrial life, and the environment.

35. The TSWQS designate uses for the state's surface waters, and establish narrative and numerical water quality standards to protect those uses.

36. The TCEQ has adopted standard procedures to implement the TSWQS, which are approved by the U.S. Environmental Protection Agency (EPA) and set forth in "Procedures to Implement the Texas Surface Water Quality Standards (RG 194)" (IPs).

37. The TSWQS and IPs are used to set permit limits for wastewater discharges.

38. The TSWQS establish "mixing zones" in the receiving water body, which are defined areas contiguous to the permitted discharge where the effluent mixes with the receiving waters. Acute toxicity to aquatic organisms is not allowed in a mixing zone, and chronic toxicity to aquatic organisms is not allowed beyond a mixing zone.

39. There are three applicable mixing zones: the zone of initial dilution (ZID), aquatic life mixing zone (ALMZ), and human health mixing zone (HHMZ).

40. For toxic substances where adequate toxicity information is available, the TSWQS establish numerical water quality standards for acute and chronic toxicity that apply at the mixing zone boundaries.

41. The TSWQS do not contain numerical criteria for salinity. However, concentrations and the relative ratios of dissolved minerals such as chloride, sulfate, and total dissolved solids must be maintained such that existing, designated, presumed, and attainable uses are not impaired.

42. Under the TSWQS, salinity gradients in estuaries must be maintained to support attainable estuarine-dependent aquatic life uses, and careful consideration must be given to all activities that may detrimentally affect salinity gradients.

Revised Draft Permit Requirements

43. The Revised Draft Permit specifies daily maximum and daily average flow limits of 110 million gallons per day (MGD) and 95.6 MGD, respectively.

44. No analytical data regarding the effluent was provided in the Application because the Facility has not yet been constructed or begun discharging, and consequently, screening against the water-quality-based effluent limits in the TSWQS could not be accomplished.

45. The Revised Draft Permit includes the following requirements:

    a. The effluent must be monitored daily for total suspended solids, total dissolved solids, chloride, and sulfate.

    b. The effluent's pH must be not less than 6.0 standard units (SU) and not more than 9.0 SU.

    c. The maximum effluent percentage limit at the ZID boundary is 14.6%.

    d. The Port Authority must conduct effluent sampling within 60 days of the initial discharge and submit the analytical data to TCEQ for screening against the water-quality-based effluent limits in the TSWQS.

    e. The Port Authority must complete a study of ambient water velocity at the outfall location and report the results to the TCEQ.

    f. The Port Authority must conduct whole effluent toxicity (WET) testing on the effluent during the first year of the discharge, with a 24-hour test every six months. The 24-hour test requires the test species to be submerged in 100% effluent from the Facility for 24 hours. The Port Authority must also conduct quarterly chronic biomonitoring for both mysid shrimp and inland silverside, using five effluent dilution concentrations and a control. If none of the first four consecutive tests demonstrates significant toxicity, the testing frequency will be reduced.

Modeling Analysis

46. The Cornell Mixing Zone (CORMIX) model is the most commonly used model to design

diffusers and evaluate mixing near outfalls.

47. The TCEQ's IPs provide for the use of the CORMIX model when a diffuser will be used, and the TCEQ has developed a guidance manual for running the model titled "Mixing Analyses Using CORMIX" (CORMIX SOPs).

48. Use of the CORMIX model was appropriate in this case.

49. The ED uses the CORMIX model to predict the percentage of effluent present at the edge of each regulatory mixing zone, and then sets permit limits based on the highest predicted effluent percentages.

50. In running the model, the ED relied on information provided in the Application and the CORMIX SOPs.

51. For the Revised Application, the ED's CORMIX modeling predicts effluent percentages of 14.6% at the ZID boundary, 8.9% at the ALMZ boundary, and 5.4% at the HHMZ boundary.

52. Use of the CORMIX model requires "schematization," the process of describing a receiving water body's actual geometry with a rectangular cross section. CORMIX's conservative module simulates the geometry of the receiving water body as a rectangle with a flat bottom and vertical sides, and does not account for variations in channel depth or a sloping bank.

53. Due to the need for schematization, some professional judgment will be necessary when selecting the inputs to the CORMIX model and a range of values may be reasonable.

54. The depth of the water body at the discharge point is an important model input because it is a variable that influences near-field mixing.

55. The depth of the channel at the outfall location is close to 65 feet but is adjacent to a 90-foot depression.

56. Using a 90-foot depth was among the range of reasonable options a modeler could select and was not inaccurate.

57. The distance from shore to the diffuser (DISTB) is an input to the model that impacts mixing predictions. Due to schematization, the shore placement effectively creates a vertical wall behind which no mixing is determined to take place; thus, the further it is located from the diffuser, the more water the model predicts will be available for mixing and dilution of the effluent.

58. The distance directly between the proposed diffuser location and the shoreline is 229 feet, but because the channel floor slopes downward from the shoreline, using that value for DISTB will overpredict mixing.

59. The modeling results were not materially different using 35 meters (114.8 feet) for DISTB, so the ED's use of 229 feet for the modeling was not materially inaccurate.

60. Using CORMIX's brine module was not required in this case.

61. The ED's modeling used reasonable inputs for ambient velocity based on data collected at the proposed discharge site.

62. The potential for an eddy to form occasionally near the proposed discharge site does not invalidate the CORMIX modeling results or indicate that inaccurate inputs were used.

63. The presence of two outcropping extending from the shoreline and the 90-foot depression introduces some uncertainty into the modeling results, but does not make them inaccurate.

64. Because salinity is in both the effluent and receiving waters, the highest predicted effluent percentages from the ED's CORMIX modeling do not provide the worst-case scenario for salinity.

65. CORMIX's margin of error does not invalidate the modeling results.

66. Including a limit on salinity in the permit is supported by the uncertainty introduced into the modeling results by the site-specific bathymetry, basing the ED's critical conditions on modeling results that do not represent the worst-case scenario for salinity, and CORMIX's margin of error.

67. The ED's CORMIX modeling inputs are either within the range of reasonable values or are not materially inaccurate.

68. The ED's CORMIX modeling is sufficient to ensure the Revised Draft Permit is protective of water quality.

69. The Port Authority separately conducted modeling with the SUNTANS model to evaluate the proposed discharge's effects in the far field as the effluent moves further from the mixing zones.

70. The SUNTANS modeling predicts that the desalination brine discharge increases computed salinity by 0-1 parts per thousand (ppt) in the vicinity of the discharge and throughout the Corpus Christi Bay system, with daily tidal fluctuations continuously mixing the discharge so that stratification is never persistent.

71. SUNTANS modeling is not required by the applicable regulatory requirements.

Antidegradation Review

72. An antidegradation review is designed to ensure that a proposed discharge does not impair the uses or degrade the water quality of the receiving waters.

73. Tier 1 and Tier 2 antidegradation reviews are required due to the exceptional aquatic life use designation at the outfall location.

74. The ED's antidegradation review for the Revised Application was performed by Peter Schaefer.

75. In conducting his Tier 1 review, Mr. Schaefer examined the Port Authority's WET tests, CORMIX modeling, static 2-minute acute tests at various salinity levels, and the SUNTANS modeling.

76. For his Tier 1 review, Mr. Schaefer also relied on the SUNTANS modeling, the salt mass balance, and the requirement that the Port Authority submit effluent data within 90 days of beginning to discharge.

77. Mr. Schaefer used a Texas Water Development Board paper to determine the optimal salinity level of red drum for his review, and also examined salinity toxicity testing by PAC witness Dr. Kristen Nielsen.

78. The ED's antidegradation review demonstrates that the proposed discharge will maintain existing uses and not lower water quality by more than a de minimis amount.

Impact on the Marine Environment, Aquatic Life, and Wildlife

79. Aransas Pass is one of five major coastal passes connecting the Gulf of Mexico with Texas's bays and estuaries. The next closest inlets are Packery Channel, a very small channel over 20 miles to the south, and the channel at Port O'Connor over 80 miles to the north.

80. Aransas Pass is the main source of productivity (e.g., spawning, migrating, and feeding) and connectivity with the Gulf of Mexico for all the fish and invertebrate populations in the entire region.

81. The Gulf-bay connection created by the Aransas Pass inlet is necessary for the life cycle of certain estuarine-dependent marine species. The adults of these species typically live and spawn offshore, and their eggs and larvae drift in coastal currents until a portion of them arrive at the coast and are drawn into the inlet. From there, some of the larvae are carried on the flood tide into the estuary where they can develop into juveniles and sub-adults, before eventually returning to the ocean as mature adults.

82. Because the inlet compounds and magnifies the marine life abundance, the impact of the proposed discharge will be disproportionately greater than what would occur in other areas with less densities and concentrations of marine life.

83. Organisms entering the Aransas Pass inlet have three alternate pathways to travel to the estuaries: Corpus Christi Ship Channel, Lydia Ann Channel, and Aransas Channel. Approximately 20% to 50% of larvae are estimated to use the Corpus Christi Ship Channel for this journey.

84. There is a zone of passage for aquatic organisms around the ZID and mixing zones. However, early life stages of aquatic species cannot swim around the effluent plume and will enter the ZID and mixing zones, and thus, come into contact with the undiluted effluent.

85. High salinity or saline imbalances can be fatal to aquatic life, particularly early life stages, such as embryos and larvae.

86. While levels of salinity rise and fall, they do so over time, allowing time for acclimation by aquatic species that protects them.

87. The ambient salinity in the Corpus Christi Ship Channel naturally fluctuates between 28 ppt and 42 ppt.

88. Salinity toxicity testing provided by the Port Authority showed that the no observable effect concentration (NOEC) for two species approved by the EPA and TCEQ for WET testing, mysid shrimp and inland silverside, were the highest concentrations tested, 45 ppt for a seven-day exposure and 55 ppt for a two-minute exposure.

89. Using mysid shrimp and inland silverside for testing was reasonable, but red drum (redfish) are more sensitive than these species, particularly in early life stages. As a result, the Port Authority's testing may not be representative of the impacts on more sensitive species or earlier life stages.

90. Salinity toxicity testing by PAC witness Dr. Nielsen did not require the use of an accredited environmental testing laboratory because she was not analyzing the components of environmental media.

91. Red drum is a reasonable surrogate for evaluating potential adverse impacts of the proposed discharge because it is an estuarine-dependent species that relies on the Corpus Christi Ship Channel and its early life stages are sensitive to salinity changes.

92. Red drum adults and juveniles successfully tolerate significantly high salinities, including those exceeding 60 ppt. Red drum eggs and larvae are more sensitive to salinity changes, especially 3- to 5-day-old larvae.

93. Red drum eggs have been shown to hatch within a wide range of salinities with best hatch-out and growth rates occurring between 33 and 43 ppt.

94. Early life stages of red drum, including 3- to 5-day-old larvae, will pass through the ZID and mixing zones.

95. Under the worst-case conditions modeled by the Executive Director, the proposed discharge will result in salinity levels at the ZID boundary as high as 44.68 ppt.

96. Exposure times will be longest during slack tide conditions, but will still be on the order of seconds and minutes, rather than hours.

97. Although eggs and larvae may be somewhat mixed in the water column, they are more concentrated in the upper portion of the water column due to their buoyancy, thereby further limiting their exposure to the discharge, which will be approximately 60 feet below the surface.

98. Abrupt changes in salinity at levels that may occur in the ZID under worst-case conditions will cause mortality to red drum larvae.

99. Other states and countries address the risk of abrupt changes in salinity from desalination discharges by setting limits on the change in salinity over ambient, generally limiting salinity increases to 2.0 ppt over ambient measured at some distance from the outfall.

100. For marine seawater desalination discharges, the Texas Parks and Wildlife Department and Texas General Land Office recommend limiting salinity increases to no more than 2.0 ppt over ambient measured at 100 meters from the outfall.

101. Because the TSWQS do not contain numeric criteria for salinity, the Revised Draft Permit's requirement to test the effluent after the discharge commences and screen it against the TSWQS's water-quality-based effluent limits does not address the concerns about salinity.

102. Including a salinity limit in the permit of 2.0 ppt over ambient to be measured at 100 meters from the outfall is necessary and appropriate to protect aquatic organisms that will be exposed to the proposed discharge.

103. The careful consideration required for evaluating the impacts of a discharge of salinity was performed.

104. With the addition of a salinity limit in the Revised Draft Permit, the proposed discharge will not adversely impact the marine environment, aquatic life, and wildlife, including spawning eggs and larval migration.

105. The piping plover is a threatened species found in Segment 2481, and the whooping crane is an endangered species that has been sighted in the Corpus Christi Bay area.

106. Because the proposed discharge will not adversely impact aquatic life, there will not be cascading effects on aquatic-dependent species, including birds.

107. The proposed discharge will not adversely impact birds and endangered or threatened species.

Impact on Recreational Activities, Commercial Fishing, and Fisheries

108. The Aransas Pass tidal inlet is a multi-species spawning site for the most economically valuable sportfishes in the region.

109. The productivity of local populations of sportfishes, including red drum, spotted seatrout, sheepshead, black drum, and southern flounder, is directly linked to, and dependent upon, the reproductive activity that occurs in the Aransas Pass inlet.

110. The fisheries in the Corpus Christi Bay, Aransas Pass inlet, and Texas Gulf of Mexico support a multi-billion-dollar commercial fishing industry for finfish, crab, and shrimp.

111. Because the proposed discharge will not adversely impact aquatic life, there will not be cascading effects on recreational and commercial fishing, or fisheries.

112. The proposed discharge will not adversely impact recreational activities, commercial fishing, and fisheries in Corpus Christi Bay and the ship channel.

Impact on Human Health

113. No party presented evidence challenging whether the proposed discharge will adversely impact the health of the requesters and their families, including whether fish and other seafood will be safe for human consumption.

114. The proposed discharge will be located at least 60 feet below the water surface, so humans will not be directly exposed to the discharge.

115. The proposed discharge will not adversely impact the health of the requestors or their families.

Accuracy and Completeness of the Application

116. That the Revised Application did not have a sponsoring witness at the Remand Hearing does not make it incomplete or inaccurate.

117. The Revised Application and supporting documentation correctly identified the Port Authority as the owner and operator of the Facility, the locations of the proposed Facility and outfall, changing velocities near the outfall, and the depth of the channel at the outfall location.

118. The whole water sampling for the Application was not conducted in a period of abnormally high rainfall.

119. Sediment sampling was not required for a complete Application.

120. Whether the Facility is properly characterized as a minor or major facility does not affect whether the Application is accurate or complete.

121. The Revised Application was complete despite not specifying the exact chemicals that will be used to treat water.

Permit Requirements

122. The Revised Draft Permit should include additional provisions requiring mixing limits for percentages of effluent at the boundaries of all three mixing zones; imposing a salinity limit of 2.0 ppt over ambient to be measured at 100 meters from the outfall; and requiring a monitoring plan.

122A. To address the mixing limits for percentages of effluent at the boundaries of all three mixing zones, the following requirement should be added to the Revised Draft Permit: The permittee shall maintain the diffuser at Outfall 001 to achieve maximum effluent percentages at the edge of each regulatory mixing zone: Zone of Initial Dilution (ZID): 14.6%; Chronic Aquatic Mixing Zone: 8.9%; Human Health Mixing Zone: 5.4%.

123. Additional provisions related to the latitude, longitude, and location of the outfall; related to chemical additives' compliance with NSF-60; related to biological surveys; and related to the intake structure do not need to be included in the Revised Draft Permit.

124. Changes to the WET testing requirements do not need to be made to the Revised Draft Permit.

Notice Requirements

125. Notice was properly mailed and published, and a copy of the Application was made available at appropriate public locations. The location of the outfall determines the owners of properties that are required to be identified in the Application as affected landowners.

126. Protestants have not challenged their own notice.

Texas Coastal Management Program

127. The ED appropriately reviewed the Application for consistency with the Texas Coastal Management Program's goals and policies.

Transcription Costs

128. For the Initial Proceeding, the total cost for recording and transcribing the prehearing conference and hearing on the merits was $17,861.26, which has been paid by the Port Authority.

129. The transcript was required by SOAH's rules.

130. No party asserts that transcript costs should be allocated to Audubon or the self-represented protestants.

131. Transcript costs cannot be assessed against the ED and OPIC because they are statutory parties who are precluded from appealing the decision of the Commission.

132. The Port Authority, PAC, and represented protestants fully participated in the hearing.

133. The Port Authority, PAC, and represented protestants have the financial ability to cover the costs associated with the transcript.

134. The Port Authority, PAC, and represented protestants benefitted equally from having a transcript.

135. It is reasonable and appropriate for PAC and represented protestants to reimburse the Port Authority $8,930.63 for transcript costs for the Initial Proceeding.

136. For the Remand Hearing, the total cost for recording and transcribing the prehearing conference and the hearing on the merits was $3,825.00.

137. The Port Authority, PAC, and represented protestants fully participated in the Remand Hearing and benefitted from a transcript.

138. That the Remand Hearing was to allow the Port Authority to provide additional evidence for its own benefit, and because once the Port Authority filed a Revised Application, the

remand's scope increased are factors relevant to a just and reasonable assessment of costs.

139. It is reasonable and appropriate for the Port Authority to bear the entire transcript costs for the Remand Hearing.

II. CONCLUSIONS OF LAW

1. The Commission has jurisdiction over water quality and the issuance of TPDES permits. Tex. Water Code §§ 5.013, 26.003, 26.011, 26.027, and 26.028.

2. The Application was referred to SOAH under Texas Water Code § 5.556.

3. SOAH has jurisdiction to conduct a hearing and prepare a proposal for decision in contested cases referred by the Commission under Texas Government Code § 2003.047.

4. Notice of the Application and the hearing were properly provided to the public and to all parties. Tex. Water Code §§ 5.115, 26.022, 26.028; Tex. Gov't Code §§ 2001.051-.052; 30 Tex. Admin. Code ch. 39.

5. The Application is subject to Texas Government Code § 2003.047(i-1)-(i-3).

6. In the Initial Proceeding, the filing of the Application, the Draft Permit, the preliminary decisions issued by the ED, and other supporting documentation in the administrative record of the Application established a prima facie case that: (i) the Draft Permit meets all state and federal legal and technical requirements; and (ii) the 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).

7. A party may rebut the prima facie demonstration by presenting evidence that: (1) relates to an issue directly referred; 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).

8. 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).

9. The Remand Hearing was to allow the Applicant to present additional evidence on specified issues. Therefore, the process of rebutting a prima facie case has previously occurred. The Applicant was not entitled to another presumption.

10. The administrative record is admitted into evidence for all purposes. 30 Tex. Admin. Code § 80.127(h).

11. There must be no significant lethality to aquatic organisms that move through a ZID. 30 Tex. Admin. Code § 307.6(e)(1).

12. Water in the state must be maintained to preclude adverse toxic effects on aquatic life. 30 Tex. Admin. Code § 307.6(b)(4).

13. Surface waters must not be toxic to man from ingestion of water, consumption of aquatic

organisms, or contact with the skin, or to terrestrial or aquatic life. 30 Tex. Admin. Code § 307.4(d).

14. Salinity gradients in estuaries must be maintained to support attainable estuarine-dependent aquatic life uses. 30 Tex. Admin. Code § 307.4(g)(3).

15. An attainable use is a use that can be reasonably achieved by a water body in accordance with its physical, biological, and chemical characteristics whether it is currently meeting that use or not. 30 Tex. Admin. Code § 307.3(a)(4).

16. Careful consideration must be given to all activities that may detrimentally affect salinity gradients. 30 Tex. Admin. Code § 307.4(g)(3).

17. The ED's antidegradation review ensures compliance with the Tier 1 and Tier 2 antidegradation standards. 30 Tex. Admin. Code § 307.5(b).

18. The ED's modeling analysis of the proposed discharge is sufficient to ensure the Revised Draft Permit is protective of water quality.

19. The Commission may accept environmental testing laboratory data and analysis for use in Commission decisions regarding any matter under the Commission's jurisdiction relating to permits or other authorizations only if the data and analysis is prepared by an accredited environmental testing laboratory. Tex. Water Code § 5.134(a).

20. The accreditation requirement applies to "environmental testing laboratory data," and an "environmental testing laboratory" is "a scientific laboratory that performs analyses to determine the chemical, molecular, or pathogenic components of environmental media for regulatory compliance purposes." Tex. Water Code § 5.801; 30 Tex. Admin. Code § 25.2(6).

21. With the additional permit requirements described in Finding of Fact No. 122, the Revised Draft Permit includes all appropriate and necessary requirements to protect the marine environment, aquatic life, wildlife, recreational activities, commercial fishing, and fisheries.

22. With the additional permit requirements described in Finding of Fact No. 122, the Revised Draft Permit is protective of water quality and the uses of the receiving waters under the applicable TSWQS. 30 Tex. Admin. Code ch. 307.

23. The Revised Draft Permit contains sufficient provisions to protect the health of the requesters and their families.

24. The Revised Draft Permit is consistent with the Texas Coastal Management Program's goals and policies. 30 Tex. Admin. Code ch. 281, subch. B.

25. The Port Authority substantially complied with all applicable notice requirements. 30 Tex. Admin. Code ch. 39.

26. No transcript costs may be assessed against the ED or OPIC because the TCEQ's rules prohibit the assessment of any cost to a statutory party who is precluded by law from appealing any ruling, decision, or other act of the Commission. Tex. Water Code §§ 5.275,

.356; 30 Tex. Admin. Code § 80.23(d)(2).

27. 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; and any other factor which is relevant to a just and reasonable assessment of the costs. 30 Tex. Admin. Code § 80.23(d)(1).

28. Considering the factors in 30 Texas Administrative Code § 80.23(d)(1), a reasonable assessment of Original Hearing transcript costs against parties to the contested case proceeding is that the Port Authority, PAC, and represented protestants should split the costs evenly, with PAC and represented protestants reimbursing the Port Authority $8,930.63.

29. Considering the factors in 30 Texas Administrative Code § 80.23(d)(1), a reasonable assessment of Remand Hearing transcript costs against parties to the contested case proceeding is that the Port Authority should bear the entire $3,825.00 costs.

III. EXPLANATION OF CHANGES

During the September 22, 2022, open meeting the Commission made the following changes to the ALJs' Proposed Order, as discussed and explained during the open meeting:

1. All references to the draft permit number in the ALJs' Proposed Order were corrected to "WQ0005253000."

2. Revised Finding of Fact No. 95 as follows: "Under the worst-case conditions modeled by the Executive Director, the proposed discharge will result in salinity levels at the ZID boundary as high as 44.68 ppt." This change is made to correct an error in interpreting the Executive Director's modeling results found in Exhibit Kings/Steves-21R.

3. Revised Finding of Fact No. 114 as follows: "The proposed discharge will be located at least 60 feet below the water surface, so humans will not be directly exposed to the discharge." This change corrects a typographical error. The location of the diffuser is specified as more than 60 feet below the surface of the water, as reflected in Exhibit APP-LT-16-R.

4. Added Finding of Fact No. 122A: "To address the mixing limits for percentages of effluent at the boundaries of all three mixing zones, the following requirement should be added to the Revised Draft Permit: The permittee shall maintain the diffuser at Outfall 001 to achieve maximum effluent percentages at the edge of each regulatory mixing zone: Zone of Initial Dilution (ZID): 14.6%; Chronic Aquatic Mixing Zone: 8.9%; Human Health Mixing Zone: 5.4%." This finding of fact is added to specify in Revised Draft permit the mixing limits for percentages of effluent at the boundaries of all three mixing zones, as identified in the Executive Director's Statement of Basis.

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. The Revised Application of the Port of Corpus Christi Authority of Nueces County for Texas Pollutant Discharge Elimination System Permit No. WQ0005253000 is granted, with the following additions: a provision requiring mixing limits for percentages of effluent at the boundaries of all three mixing zones; imposing a salinity limit of 2.0 ppt over ambient to be measured at 100 meters from the outfall; and a monitoring plan.

2. PAC and represented protestants shall pay $8,930.63 of the transcription costs for the Initial Proceeding, with the Port Authority paying the remainder of transcription costs for all other proceedings.

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 § 2001.144 and 30 Texas Administrative Code § 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.

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

Jon Niermann, Chairman

12/20/22
Dated

TPDES PERMIT NO.
WQ0005253000
[For TCEQ office use only -
EPA I.D. No. TX0138347]

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

Port of Corpus Christi Authority of Nueces County

whose mailing address is

P.O. Box 1541
Corpus Christi, Texas 78403

is authorized to treat and discharge wastes from Harbor Island Property - Former FINA Tank Farm, a seawater desalination facility (SIC 4941 and 4491)

located adjacent to State Highway 361 just northeast of the Ferry Landing, Nueces County, Texas 78336

via pipe directly to Corpus Christi Bay in Segment No. 2481 of the Bays and Estuaries

only according to effluent limitations, monitoring requirements, and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight, five years from the date of permit issuance.

ISSUED DATE: December 20, 2022

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS — Outfall Number 001

1. During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge water treatment wastes [1] subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 95.6 million gallons per day (MGD). The daily maximum flow shall not exceed 110 MGD.

Effluent Characteristics	Discharge Limitations					Minimum Self-Monitoring Requirements	
	Daily Average		Daily Maximum		Single Grab	Report Daily Average and Daily Maximum	
	lbs/day	mg/L	lbs/day	mg/L	mg/L	Measurement Frequency	Sample Type
Flow	95.6 MGD		110 MGD		N/A	Continuous	Totalizer
Total Suspended Solids	Report	Report	Report	Report	N/A	1/day	Grab
Total Dissolved Solids	Report	Report	Report	Report	N/A	1/day	Grab
Chloride	Report	Report	Report	Report	N/A	1/day	Grab
Sulfate	Report	Report	Report	Report	N/A	1/day	Grab

2. The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/day by grab sample.

3. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

4. Effluent monitoring samples must be taken at the following location: At Outfall 001, following commingling of all wastewater and prior to discharging into Corpus Christi Bay.

[1] See Other Requirement No. 2.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC §§305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in Texas Water Code §26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

   a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder, and limited to major domestic wastewater discharge facilities with a one million gallons per day or greater permitted flow.

   b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.

   c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.

   d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.

   e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.

   f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

   a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.

      i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

      ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.

   b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.

   c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.

d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the sampling day.

   The "daily discharge" determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

e. Bacteria concentration (Fecal coliform, *E. coli*, or Enterococci) – the number of colonies of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substitute value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD × Concentration, mg/L × 8.34).

g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

3. Sample Type

   a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC §319.9(a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC §319.9(c).

   b. Grab sample - an individual sample collected in less than 15 minutes.

4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.

5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.

6. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

   Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§319.4 - 319.12. Unless otherwise

specified, effluent monitoring data shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge that is described by this permit whether or not a discharge is made for that month. Monitoring results must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Monitoring results must be signed and certified as required by Monitoring and Reporting Requirements No. 10.
As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act; TWC Chapters 26, 27, and 28; and THSC Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

   a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.

   b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

   a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

   b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR §264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.

   c. Records of monitoring activities shall include the following:

      i. date, time, and place of sample or measurement;
      ii. identity of individual who collected the sample or made the measurement;
      iii. date and time of analysis;
      iv. identity of the individual and laboratory who performed the analysis;
      v. the technique or method of analysis; and
      vi. the results of the analysis or measurement and quality assurance/quality control records.

      The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

   If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

   All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

   Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the regional office and the Enforcement Division (MC 224).

7. Noncompliance Notification

   a. In accordance with 30 TAC §305.125(9) any noncompliance that may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the regional office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the regional office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective September 1, 2020, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

   b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:

      i. unauthorized discharges as defined in Permit Condition 2(g).
      ii. any unanticipated bypass that exceeds any effluent limitation in the permit.
      iii. violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.

   c. In addition to the above, any effluent violation that deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the regional office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.

   d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.

8. In accordance with the procedures described in 30 TAC §§35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.

9. Changes in Discharges of Toxic Substances

   All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the regional office, orally or by facsimile transmission within 24 hours, and both the regional office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i. one hundred micrograms per liter (100 µg/L);
ii. two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
iii. five (5) times the maximum concentration value reported for that pollutant in the permit application; or
iv. the level established by the TCEQ.

b. That any activity has occurred or will occur that would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i. five hundred micrograms per liter (500 µg/L);
ii. one milligram per liter (1 mg/L) for antimony;
iii. ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
iv. the level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC §305.128 (relating to Signatories to Reports).

11. All POTWs must provide adequate notice to the Executive Director of the following:

a. any new introduction of pollutants into the POTW from an indirect discharger that would be subject to CWA §301 or §306 if it were directly discharging those pollutants;

b. any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and

c. for the purpose of this paragraph, adequate notice shall include information on:

i. the quality and quantity of effluent introduced into the POTW; and
ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS

1. General

a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.

b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:

i. violation of any terms or conditions of this permit;
ii. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
iii. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending, or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.

b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.

c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.

e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.

f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§305.62 and 305.66 and TWC §7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.

h. In accordance with 30 TAC §305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility that does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.

i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA §402, or any requirement imposed in a pretreatment program approved under the CWA §§402(a)(3) or 402(b)(8).

3. Inspections and Entry

a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC Chapter 361.

b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit, or other order of the Commission. Members, employees, or agents of

the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC §7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment or Renewal

   a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:

      i. the alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC §305.534 (relating to New Sources and New Dischargers); or

      ii. the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9; or

      iii. the alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

   b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.

   c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.

   d. Prior to accepting or generating wastes that are not described in the permit application or that would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.

   e. In accordance with the TWC §26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.

   f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA §307(a) for a toxic pollutant that is present in the discharge and that standard or prohibition is more stringent than any

limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA §307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

   a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.

   b. A permit may be transferred only according to the provisions of 30 TAC §305.64 (relating to Transfer of Permits) and 30 TAC §50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

   This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

   Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to Texas Water Code Chapter 11.

8. Property Rights

   A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

   The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

    The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy.

    a. Each permittee shall notify the executive director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:

       i. the permittee;
       ii. an entity (as that term is defined in 11 USC, §101(15)) controlling the permittee or listing the permit or permittee as property of the estate; or
       iii. an affiliate (as that term is defined in 11 USC, §101(2)) of the permittee.

    b. This notification must indicate:

       i. the name of the permittee;
       ii. the permit number(s);
       iii. the bankruptcy court in which the petition for bankruptcy was filed; and
       iv. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.

2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§319.21 - 319.29 concerning the discharge of certain hazardous metals.

3. Domestic wastewater treatment facilities shall comply with the following provisions:

   a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.

   b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment or other treatment unit regulated by this permit.

4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, or retention of inadequately treated wastewater.

5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.

6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC §7.302(b)(6).

7. Documentation

   For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.

a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion or upgrading of the domestic wastewater treatment or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment or collection facilities. In the case of a domestic wastewater treatment facility that reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

   If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 149) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission, and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.

c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.

10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.

11. Facilities that generate industrial solid waste as defined in 30 TAC §335.1 shall comply with these provisions:

    a. Any solid waste, as defined in 30 TAC §335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.

    b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.

c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC §335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.

d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC §335.5.

e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.

f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC Chapter 335 and must include the following, as it pertains to wastewater treatment and discharge:

i. volume of waste and date(s) generated from treatment process;
ii. volume of waste disposed of on-site or shipped off-site;
iii. date(s) of disposal;
iv. identity of hauler or transporter;
v. location of disposal site; and
vi. method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

12. For industrial facilities to which the requirements of 30 TAC Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC Code Chapter 361.

OTHER REQUIREMENTS

1. The executive director reviewed this action for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in accordance with the regulations of the General Land Office and determined that the action is consistent with the applicable CMP goals and policies.
2. The term *water treatment wastes* includes, but is not limited to, cold lime water treatment wastes, demineralizer backwash, filter backwash, ion exchange water treatment system wastes, membrane regeneration wastes, supernate, filtrate, and reverse osmosis reject water.
3. MIXING ZONES

   The permittee shall maintain the diffuser at Outfall 001 to achieve a maximum dilution of 8.9 percent effluent at the edge of the chronic aquatic life mixing zone. The chronic aquatic life mixing zone at Outfall 001 is defined as a 553-foot by 227-foot rectangle that is centered on the diffuser with the longer edge extending along the diffuser barrel. This area is approximately equal to the area of a 200-foot radius circle. Chronic toxic criteria apply at the edge of the chronic aquatic life mixing zone.

   The permittee shall maintain the diffuser at Outfall 001 to achieve a maximum dilution of 5.4 percent effluent at the edge of the human health mixing zone. The human health mixing zone at Outfall 001 is defined as a volume within a 1,053-foot by 477-foot rectangle centered on the diffuser with the longer edge along the diffuser barrel. This area is approximately equal to the area of a 400-foot radius circle.
4. The permittee shall maintain the diffuser at Outfall 001 to achieve a maximum dilution of 14.6 percent effluent at the edge of the zone of initial dilution (ZID). The ZID is defined as a 184-foot by 43-foot rectangle that is centered on the diffuser barrel with the longer edge extending along the diffuser barrel. This area is approximately equal to the area of a 50-foot radius circle.
5. This permit does not authorize the discharge of domestic wastewater. All domestic wastewater must be disposed of in an approved manner, such as routing to an approved on-site septic tank and drainfield system or to an authorized third party for treatment and disposal.
6. The sludge from the treatment process must be digested, dewatered, and disposed of in accordance with all the applicable rules of the TCEQ. The permittee shall ensure that the disposal of sludge does not cause any contamination of the ground or surface waters in the state. The permittee shall keep records of all sludge removed from the wastewater treatment plant site. Such records shall include the following information:

   A. volume (dry weight basis) of sludge disposed of;

   B. date of disposal;

   C. identity and registration number of hauler;

   D. location and registration or permit number of disposal site; and

   E. method of final disposal.

   The above records must be maintained on a monthly basis and be available at the plant site for inspection by authorized representatives of the TCEQ for at least three (3) years.
7. Reporting requirements pursuant to 30 TAC Sections 319.1-319.11 and any additional effluent reporting requirements contained in the permit are suspended from the effective date of the permit until plant startup or discharge from the facility described by this permit, whichever comes first. The permittee shall provide written notice to the TCEQ Region 14 Office and the Applications Review and Processing Team (MC-148) of the Water Quality Division at least forty-five days prior

to plant startup or anticipated discharge, whichever occurs first, on Notification of Completion Form 20007.

8. Wastewater discharged via Outfall 001 must be sampled and analyzed as directed below for those parameters listed in Tables 1, 2, and 3 of Attachment A of this permit. Analytical testing for Outfall 001 must be completed within 60 days of initial discharge. Results of the analytical testing must be submitted within 90 days of initial discharge to the TCEQ Industrial Permits Team (MC-148). Based on a technical review of the submitted analytical results, an amendment may be initiated by TCEQ staff to include additional effluent limitations, monitoring requirements, or both.

   Table 1: Analysis is required for all pollutants in Table 1. Wastewater must be sampled and analyzed for those parameters listed in Table 1 for a minimum of four sampling events that are each at least one week apart.

   Table 2: Analysis is required for those pollutants in Table 2 that are used at the facility that could in any way contribute to contamination in the Outfall 001 discharge. Sampling and analysis must be conducted for a minimum of four sampling events that are each at least one week apart.

   Table 3: For all pollutants listed in Table 3, the permittee shall indicate whether each pollutant is believed to be present or absent in the discharge. Sampling and analysis must be conducted for each pollutant believed present for a minimum of one sampling event.

   The permittee shall report the flow at Outfall 001 in MGD in the attachment. The permittee shall indicate on each table whether the samples are composite (C) or grab (G) by checking the appropriate box.

9. During the term of the permit, the permittee shall complete a study of ambient water velocity and submit a report to the TCEQ Water Quality Assessment Section (MC-150) summarizing measured ambient water velocity at the location of Outfall 001. The report must include results of measurements of speed and direction of the tidal current collected at the depth of the proposed/installed diffuser barrel. The measurements shall capture velocities encompassing a complete tidal cycle and be collected during a period in which maximum tidal amplitude typically occurs.

10. A salinity limit of 2 part per thousand (ppt) over ambient salinity effective 100 meters from Outfall 001 is a requirement of this permit. Compliance with this requirement shall be determined according to the receiving water monitoring plan in Attachment B.

Attachment A

Table 1

Outfall No.: ☐C ☐G	Effluent Concentration (mg/L)					
Pollutants	**Samp.**	**Samp.**	**Samp.**	**Samp.**	**Average**	
Flow (MGD)						
BOD (5-day)						
CBOD (5-day)						
Chemical Oxygen Demand						
Total Organic Carbon						
Dissolved Oxygen						
Ammonia Nitrogen						
Total Suspended Solids						
Nitrate Nitrogen						
Total Organic Nitrogen						
Total Phosphorus						
Oil and Grease						
Total Residual Chlorine						
Total Dissolved Solids						
Sulfate						
Chloride						
Fluoride						
Temperature (°F)						
Total Alkalinity (mg/L as $CaCO_3$)						
pH (Standard Units; min/max)						

	Effluent Concentration (µg/L)[1]					MAL[2] (µg/L)
Total Aluminum						2.5
Total Antimony						5
Total Arsenic						0.5
Total Barium						3
Total Beryllium						0.5
Total Cadmium						1
Total Chromium						3
Trivalent Chromium						N/A
Hexavalent Chromium						3
Total Copper						2
Cyanide						10
Total Lead						0.5
Total Mercury						0.005
Total Nickel						2
Total Selenium						5
Total Silver						0.5
Total Thallium						0.5
Total Zinc						5.0

[1] Indicate units if different from µg/L.
[2] Minimum Analytical Level.

Table 2

Outfall No.: ☐C ☐G Pollutant	Samp. 1 (µg/L) [1]	Samp. 2 (µg/L) [1]	Samp. 3 (µg/L) [1]	Samp. 4 (µg/L) [1]	Avg. (µg/L) [1]	MAL (µg/L)
Acrylonitrile						50
Anthracene						10
Benzene						10
Benzidine						50
Benzo(*a*)anthracene						5
Benzo(*a*)pyrene						5
Bis(2-chloroethyl)ether						10
Bis(2-ethylhexyl)phthalate						10
Bromodichloromethane						10
Bromoform						10
Carbon Tetrachloride						2
Chlorobenzene						10
Chlorodibromomethane						10
Chloroform						10
Chrysene						5
Cresols						10
1,2-Dibromoethane						10
m-Dichlorobenzene						10
o-Dichlorobenzene						10
p-Dichlorobenzene						10
3,3'-Dichlorobenzidine						5
1,2-Dichloroethane						10
1,1-Dichloroethylene						10
Dichloromethane						20
1,2-Dichloropropane						10
2,4-Dimethylphenol						10
Di-*n*-Butyl Phthalate						10
Ethylbenzene						10
Fluoride						500
Hexachlorobenzene						5
Hexachlorobutadiene						10
Hexachlorocyclopentadiene						10
Hexachloroethane						20
Methyl Ethyl Ketone						50
Nitrobenzene						10
N-Nitrosodiethylamine						20
N-Nitroso-di-*n*-Butylamine						20
Nonylphenol						333
Pentachlorobenzene						20
Pentachlorophenol						5
Phenanthrene						10
Polychlorinated Biphenyls (PCBs) [2]						0.2
Pyridine						20
1,2,4,5-Tetrachlorobenzene						20
1,1,2,2-Tetrachloroethane						10

Outfall No.: ☐C ☐G Pollutant	Samp. 1 (µg/L) [1]	Samp. 2 (µg/L) [1]	Samp. 3 (µg/L) [1]	Samp. 4 (µg/L) [1]	Avg. (µg/L) [1]	MAL (µg/L)
Tetrachloroethylene						10
Toluene						10
1,1,1-Trichloroethane						10
1,1,2-Trichloroethane						10
Trichloroethylene						10
2,4,5-Trichlorophenol						50
TTHM (Total Trihalomethanes)						10
Vinyl Chloride						10

[1] Indicate units if different from µg/L.
[2] Total PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, PCB-1016.

Table 3

Outfall No.: ☐C ☐G Pollutant	Believed Present	Believed Absent	Effluent Concentration (mg/L)		No. of Samples
			Average	Maximum	
Bromide					
Color (PCU)					
Nitrate-Nitrite (as N)					
Sulfide (as S)					
Sulfite (as SO_3)					
Surfactants					
Total Boron					
Total Cobalt					
Total Iron					
Total Magnesium					
Total Molybdenum					
Total Manganese					
Total Tin					
Total Titanium					

[1] Indicate units if different from µg/L.

Attachment B
Receiving Water Monitoring Plan

Objective
Provide a monitoring plan to demonstrate compliance with the TPDES permit effluent limit for salinity of 2.0 parts per thousand (ppt) over ambient at a distance of 100 meters (m) from the outfall.

Scope
In-situ monitoring will be conducted in the Corpus Christi Ship Channel at a monthly frequency [twelve (12) times per year] from a motor vessel using direct-reading instrumentation during typical discharge waste type and volume conditions. If monitoring data demonstrates compliance with the 2.0 ppt over ambient salinity limit in the first year of operation, upon TCEQ approval, sampling may subsequently be conducted on a quarterly or semi-annual basis[1]. The sampling locations described in this plan will be verified by an on-board Global Positioning System (GPS) during each sampling event. Each monitoring event will consist of three tidal phases: the ebb tide phase, the slack tide phase, and the flood tide phase.

For each tidal phase, an ambient surface water monitoring station will be sampled at 1 m depth intervals beginning at 0.3 m above the channel bottom and ending at 0.3 m below the water surface. For each phase, after the ambient water monitoring station is sampled, two plume monitoring stations (the Slack Tide Plume Monitoring Station and either the Flood Tide or Ebb Tide Plume Monitoring Station, depending on the phase) will then be sampled at 1 m depth intervals beginning at 0.3 m above the channel bottom and ending at 0.3 m below the water surface.

Station Locations
The three diffuser plume monitoring stations that will be referred to in this plan as "downstream"[2] locations are:

1. Ebb Tide Plume Monitoring Station – located 100 m east (toward the Gulf of Mexico) of the outermost eastern port of the diffuser. This is the downstream station during the ebb tide phase.
2. Flood Tide Plume Monitoring Station – located 100 m west (towards Corpus Christi Bay) of the outermost western port of the diffuser. This is the downstream location during flood tide phase.
3. Slack Tide Plume Monitoring Station – located 100 m south (toward Port Aransas) of the center of the diffuser barrel (i.e., cross-channel). This is the downstream location during slack tide phase.

The ambient (upstream) monitoring stations will each be located 200 m from the outermost port of the outfall in the opposite direction from the location of each downstream location:

1. Ebb Tide Ambient Station – located 200 m west (toward Corpus Christi Bay) of the outermost west port of the diffuser.
2. Flood Tide Ambient Station – located 200 m east (toward the Gulf of Mexico) of the outermost east port of the diffuser.
3. Slack Tide Ambient Station – located at either the Ebb Tide Ambient Station or Flood Tide Ambient Station depending on whether the immediately preceding condition is flood or ebb tide, i.e., if the sample is collected following a flood tide (water moving into Corpus Christi

[1] The determination of the frequency of sampling after the first 12 months will be based on statistical analysis of the first 12 months of data.

[2] The term "downstream" as used in this plan signifies the direction of the ambient current that carries the effluent plume away from the diffuser, or in the case of the slack tide the direction that the effluent plume travels when the current is not strong enough to deflect the effluent plume.

Bay), then the measurements will be collected at the Flood Tide Ambient Station and vice-versa.

The GPS coordinates of each sample station will be determined after completion of construction of the diffuser and will be provided to TCEQ for approval at least 60 days before discharge from the operational desalination facility begins. Measurements will be collected at each of these stations by positioning the vessel utilizing the on-board GPS equipment.

Monitoring Data

For each applicable plume monitoring station and ambient monitoring station for each phase, the recorded monitoring data will be as follows:

1. GPS coordinates.
2. Date and time of measurements.
3. Total water depth.
4. Specific Conductance – (measured at 0.3 m above the channel bottom to 0.3 m below the water surface at 1-m intervals).
5. Temperature – (measured at 0.3 m above the channel bottom to 0.3 m below the water surface at 1-m intervals).
6. Salinity – calculated from the measured temperature and specific conductance at each interval, then averaged at each station. [3]
7. Surface elevations – calculated using the water level elevation (tides) obtained from the NOAA Port Aransas Texas Station ID 8775327 for each monitoring event.
8. Weather conditions and ship traffic during each monitoring event.

Measurements for the flood tide phase and the ebb tide phase, will begin at least two hours after slack tide occurs and more than one hour before the following slack tide is expected, based on tide tables for NOAA Port Aransas Texas Station ID 8775327.

Measurements for the slack tide phase will be collected within one hour either side of predicted slack tide based on tide tables for NOAA Port Aransas Texas Station ID 8775327.

All monitoring data will be recorded in a logbook and will be maintained in accordance with TPDES permit requirements.

Data Analysis

The average calculated salinity from the applicable ambient monitoring station during the ebb tide phase, the flood tide phase, and the slack tide phase will define the "ambient" salinity conditions for determining the increase above ambient salinity for each respective phase.

For each phase, the increase in salinity above ambient will be calculated by subtracting the average salinity at the applicable ambient monitoring station from the average salinity at the applicable plume monitoring station. Negative values will be recorded if they occur.

Salinity measurements above ambient for each monitored phase will then be averaged to determine the increase in salinity over ambient for the monitoring event, which will be reported in the discharge monitoring report (DMR) for the month the monitoring event occurs.

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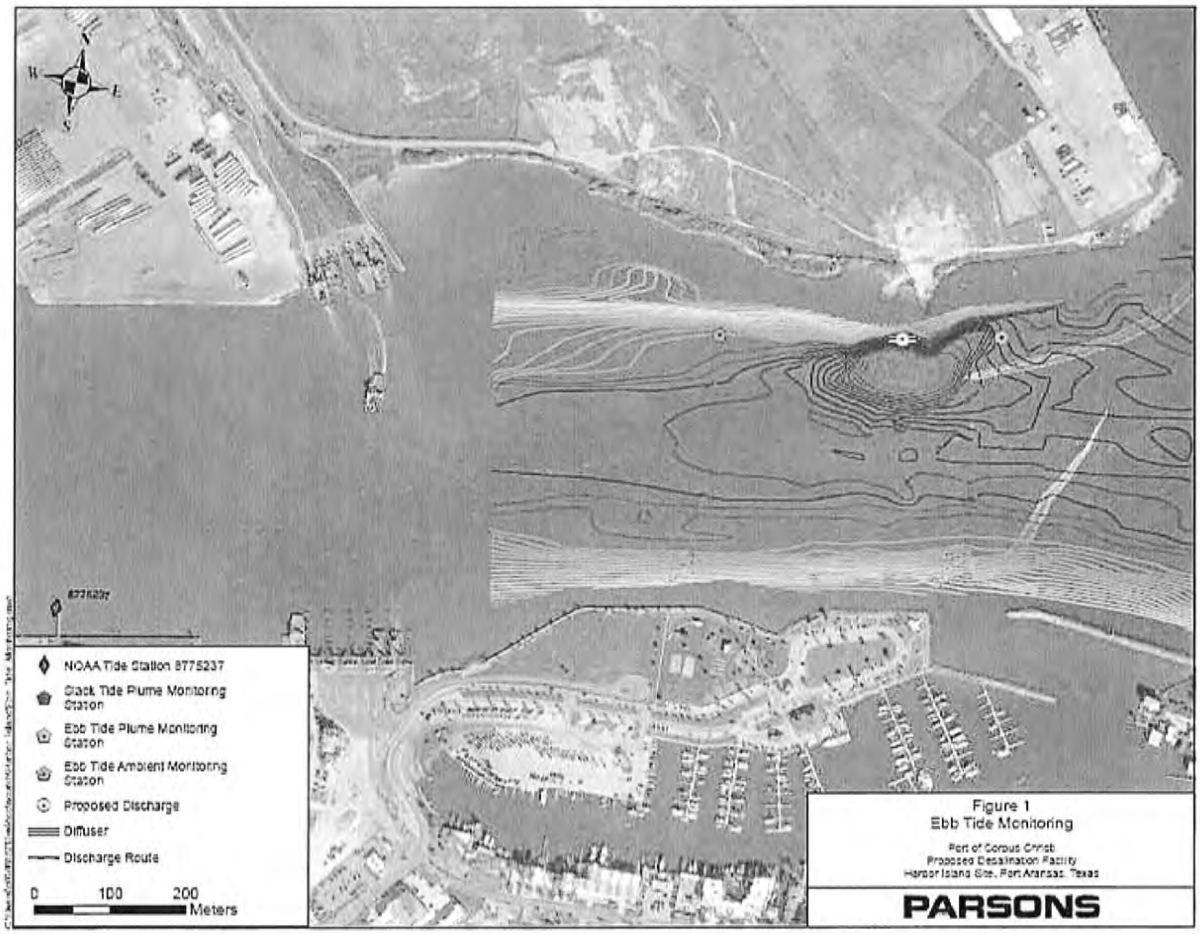
[3] The Texas Commission on Environmental Quality (TCEQ's) surface water monitoring manual *Surface Water Quality Monitoring Procedures, Volume 1: Physical and Chemical Monitoring Methods* (RG-415) specifies that salinity (TCEQ parameter code 00480) is calculated from specific conductance and water temperature. This will be the method used in this monitoring plan.

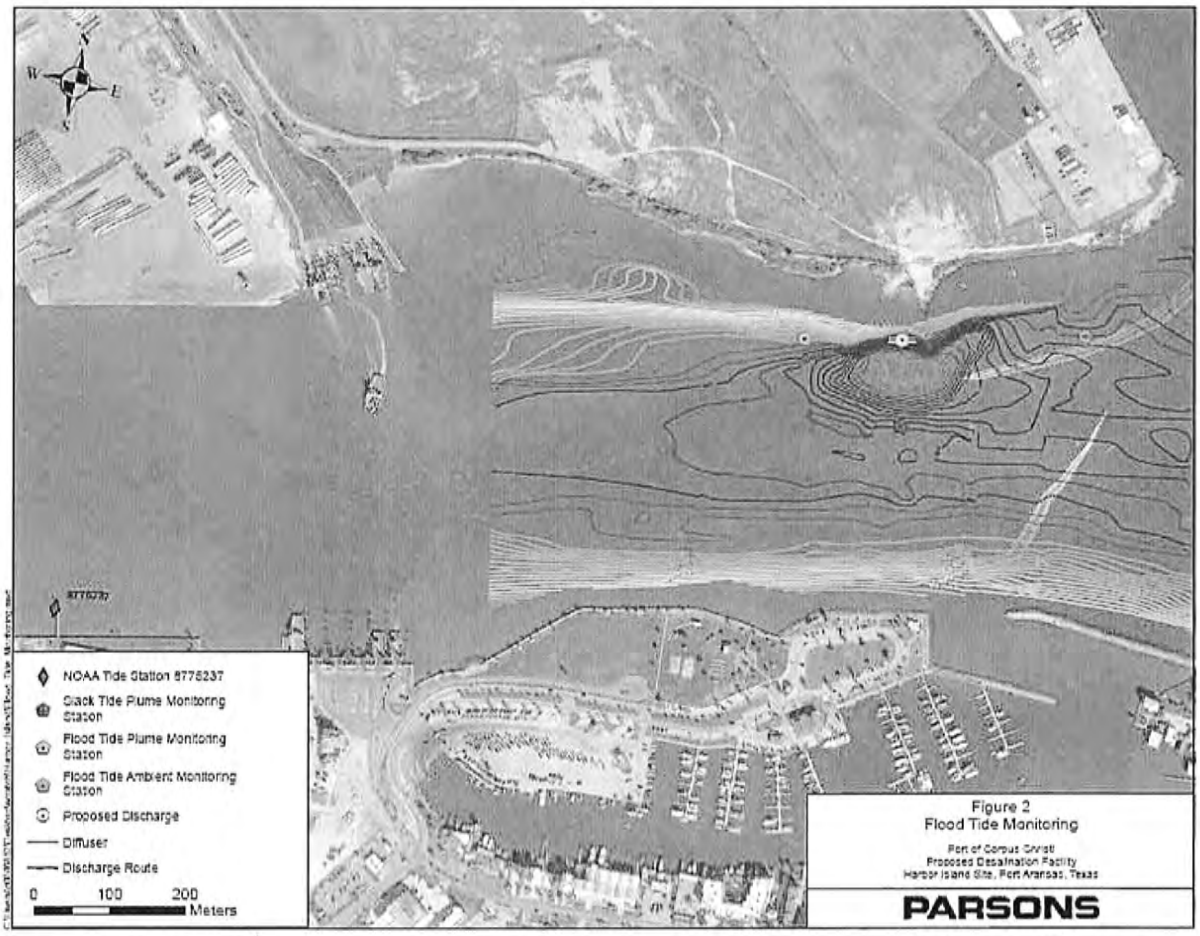
Compliance Determination
Compliance with the TPDES permit effluent limit for salinity of 2.0 ppt over ambient at 100 m from the outfall is demonstrated if the reported increase in salinity above ambient for the monitoring event, as described in the data analysis section above, is less than or equal to 2 ppt.

Equipment
The equipment requirements are as follows:

1. Motor vessel(s) capable of maintaining a fixed position in the channel under normal current conditions utilizing a GPS.
2. Equipment and procedures consistent with those specified in *Surface Water Quality Monitoring Procedures, Volume 1: Physical and Chemical Monitoring Methods* (RG-415), most recent edition, for measuring in-situ salinity (specific conductance) and temperature.
3. Water quality monitoring equipment calibrated as specified by RG-415 (most recent edition).
4. GPS location system calibrated in accordance with manufacturer's specifications.

Quality Assurance – Quality Control (QA/QC)
All QA/QC will be as specified in RG-415 (most recent edition) for all equipment used in this plan.


NOAA Tide Station 8775237
Black Tide Plume Monitoring Station
Ebb Tide Plume Monitoring Station
Ebb Tide Ambient Monitoring Station
Proposed Discharge
Diffuser
Discharge Route
0 100 200
Meters
Figure 1
Ebb Tide Monitoring
Port of Corpus Christi
Proposed Desalination Facility
Harbor Island Site, Port Aransas, Texas
PARSONS


N
W
E
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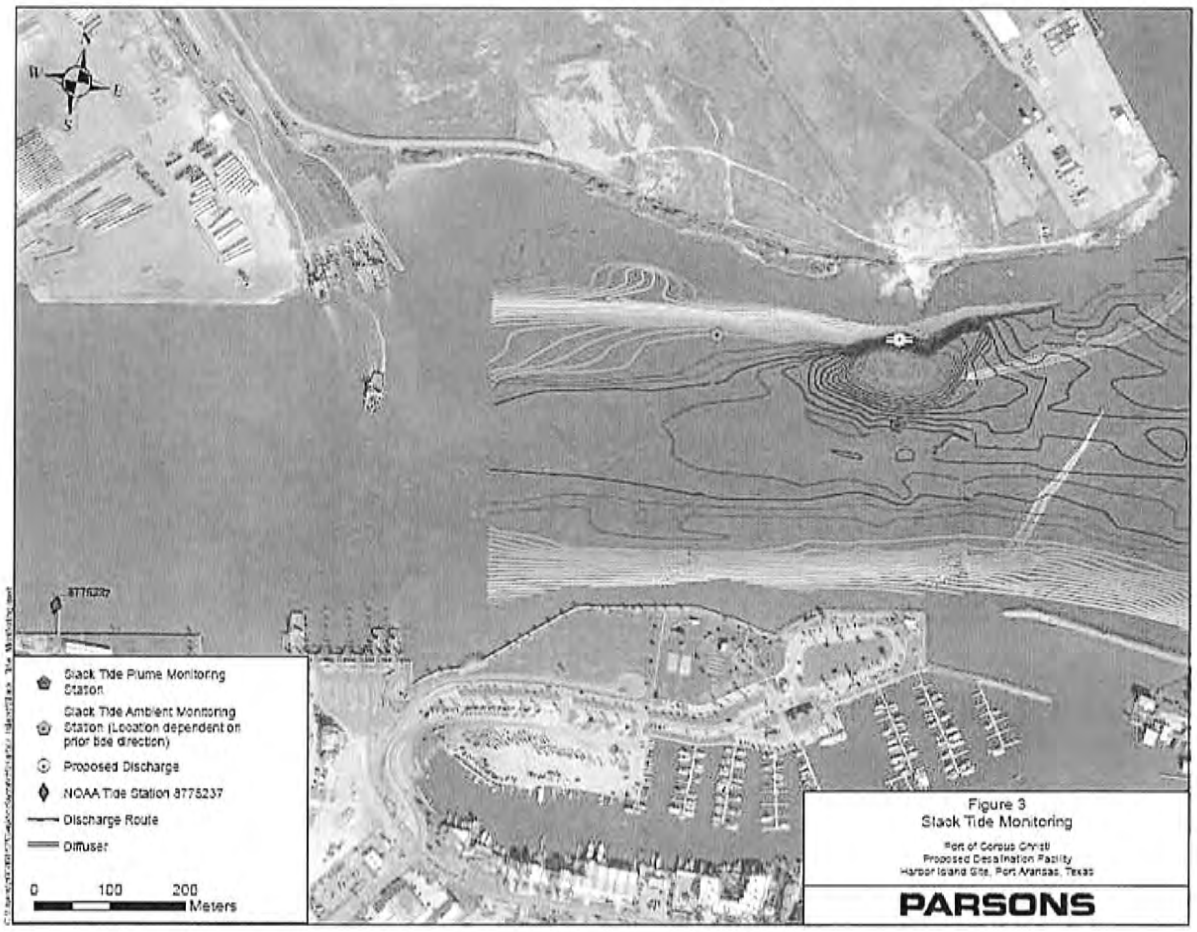
8776237
NOAA Tide Station 8776237
Black Tide Plume Monitoring Station
Flood Tide Plume Monitoring Station
Flood Tide Ambient Monitoring Station
Proposed Discharge
Diffuser
Discharge Route
0 100 200
Meters
Figure 2
Flood Tide Monitoring
Port of Corpus Christi
Proposed Desalination Facility
Harbor Island Site, Port Aransas, Texas
PARSONS


N
W
E
S
8775237
Slack Tide Plume Monitoring Station
Slack Tide Ambient Monitoring Station (Location dependent on prior tide direction)
Proposed Discharge
NOAA Tide Station 8775237
Discharge Route
Diffuser
0 100 200
Meters
Figure 3
Slack Tide Monitoring
Port of Corpus Christi
Proposed Desalination Facility
Harbor Island Site, Port Aransas, Texas
PARSONS

CHRONIC BIOMONITORING REQUIREMENTS: MARINE

The provisions of this section apply to Outfall 001 for whole effluent toxicity (WET) testing.

1. Scope, Frequency and Methodology

a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival or growth of the test organisms.

b. Within 90 days of initial discharge, the permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified below and in accordance with "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms," third edition (EPA-821-R-02-014) or its most recent update:

1) Chronic static renewal 7-day survival and growth test using the mysid shrimp (*Mysidopsis bahia*) (Method 1007.0). A minimum of eight replicates with five organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

2) Chronic static renewal 7-day larval survival and growth test using the inland silverside (*Menidia beryllina*) (Method 1006.0). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These effluent dilution concentrations are 4%, 5%, 7%, 9%, and 12% effluent. The critical dilution, defined as 9% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.

d. This permit may be amended to require a WET limit, a chemical-specific limit, a best management practice, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

e. Testing Frequency Reduction

1) If none of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee may submit this information in writing and, upon approval, reduce the testing frequency to once per six months for the invertebrate test species and once per year for the vertebrate test species.

2) If one or more of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee shall continue quarterly testing for that

species until this permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant toxicity, the permittee will resume a quarterly testing frequency for that species until this permit is reissued.

2. Required Toxicity Testing Conditions

a. Test Acceptance - The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fails to meet any of the following criteria:

1) a control mean survival of 80% or greater;

2) a control mean dry weight of surviving mysid shrimp of 0.20 mg or greater;

3) a control mean dry weight for surviving unpreserved inland silverside of 0.50 mg or greater and 0.43 mg or greater for surviving preserved inland silverside.

4) a control coefficient of variation percent (CV%) between replicates of 40 or less in the growth and survival tests;

5) a critical dilution CV% of 40 or less in the growth and survival endpoints for either growth and survival test. However, if statistically significant lethal or nonlethal effects are exhibited at the critical dilution, a CV% greater than 40 shall not invalidate the test;

6) a percent minimum significant difference of 37 or less for mysid shrimp growth; and

7) a percent minimum significant difference of 28 or less for inland silverside growth.

b. Statistical Interpretation

1) For the mysid shrimp and the inland silverside larval survival and growth tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be in accordance with the manual referenced in Part 1.b.

2) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported correctly. The document entitled "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.

3) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the survival in the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 80% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.

4) The NOEC is defined as the greatest effluent dilution at which no significant effect is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which a significant effect is demonstrated. A significant effect is herein defined as a statistically significant difference between the survival, reproduction, or growth of the test organism in a specified effluent dilution compared to the survival, reproduction, or growth of the test organism in the control (0% effluent).

5) The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 2.

6) Pursuant to the responsibility assigned to the permittee in Part 2.b.2), test results that demonstrate a non-monotonic (non-continuous) concentration-response relationship may be submitted, prior to the due date, for technical review. The guidance manual referenced in Part 1.b. will be used when making a determination of test acceptability.

7) TCEQ staff will review test results for consistency with rules, procedures, and permit requirements.

c. Dilution Water

1) Dilution water used in the toxicity tests must be the receiving water collected as close to the point of discharge as possible but unaffected by the discharge.

2) Where the receiving water proves unsatisfactory as a result of preexisting instream toxicity (i.e., fails to fulfill the test acceptance criteria of Part 2.a.), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements of Part 2.a;

b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days); and

c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3.

3) The synthetic dilution water shall consist of standard, reconstituted seawater. Upon approval, the permittee may substitute other dilution water with chemical and physical characteristics similar to that of the receiving water.

d. Samples and Composites

1) The permittee shall collect a minimum of three composite samples from Outfall 001. The second and third composite samples will be used for the renewal of the

dilution concentrations for each toxicity test.

2) The permittee shall collect the composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.

3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the first composite sample. The holding time for any subsequent composite sample shall not exceed 72 hours. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

4) If Outfall 001 ceases discharging during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions, and the sample holding time are waived during that sampling period. However, the permittee must have collected an effluent composite sample volume sufficient to complete the required toxicity tests with renewal of the effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required in this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated whether carried to completion or not.

b. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit.

1) Annual biomonitoring test results are due on or before January 20th for biomonitoring conducted during the previous 12-month period.

2) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.

3) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th, for biomonitoring conducted during the previous calendar quarter.

4) Monthly biomonitoring test results are due on or before the 20th day of the month following sampling.

c. Enter the following codes for the appropriate parameters for valid tests only:

1) For the mysid shrimp, Parameter TLP3E, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

2) For the mysid shrimp, Parameter TOP3E, report the NOEC for survival.

3) For the mysid shrimp, Parameter TXP3E, report the LOEC for survival.

4) For the mysid shrimp, Parameter TWP3E, enter a "1" if the NOEC for growth is less than the critical dilution; otherwise, enter a "0."

5) For the mysid shrimp, Parameter TPP3E, report the NOEC for growth.

6) For the mysid shrimp, Parameter TYP3E, report the LOEC for growth.

7) For the inland silverside, Parameter TLP6B, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

8) For the inland silverside, Parameter TOP6B, report the NOEC for survival.

9) For the inland silverside, Parameter TXP6B, report the LOEC for survival.

10) For the inland silverside, Parameter TWP6B, enter a "1" if the NOEC for growth is less than the critical dilution; otherwise, enter a "0."

11) For the inland silverside, Parameter TPP6B, report the NOEC for growth.

12) For the inland silverside, Parameter TYP6B, report the LOEC for growth.

d. Enter the following codes for retests only:

1) For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

2) For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

4. Persistent Toxicity

The requirements of this part apply only when a test demonstrates a significant effect at the critical dilution. Significant effect and significant lethality were defined in Part 2.b. Significant sublethality is defined as a statistically significant difference in growth at the critical dilution when compared to the growth of the test organism in the control.

a. The permittee shall conduct a total of 2 additional tests (retests) for any species that demonstrates a significant effect (lethal or sublethal) at the critical dilution. The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test.

b. If the retests are performed due to a demonstration of significant lethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5. The provisions of Part 4.a. are suspended upon completion of the two retests and submittal of the TRE

Action plan and schedule defined in Part 5.

If neither test demonstrates significant lethality and the permittee is testing under the reduced testing frequency provision of Part 1.e., the permittee shall return to a quarterly testing frequency for that species.

c. If the two retests are performed due to a demonstration of significant sublethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall again perform two retests as stipulated in Part 4.a.

d. If the two retests are performed due to a demonstration of significant sublethality, and neither test demonstrates significant lethality, the permittee shall continue testing at the quarterly frequency.

e. Regardless of whether retesting for lethal or sublethal effects or a combination of the two, no more than one retest per month is required for a species.

5. Toxicity Reduction Evaluation

a. Within 45 days of the retest that demonstrates significant lethality, or within 45 days of being so instructed due to multiple toxic events, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

b. Within 90 days of the retest that demonstrates significant lethality, or within 90 days of being so instructed due to multiple toxic events, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall describe an approach for the reduction or elimination of lethality for both test species defined in Part 1.b. At a minimum, the TRE Action Plan shall include the following:

1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled, "Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;

3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and

4) Project Organization - The TRE action plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.

d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;

2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;

3) any data and substantiating documentation which identifies the pollutant and source of effluent toxicity;

4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

5) any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and

6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.

e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.

f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive months with at least monthly testing. At the end of the 12 months, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are herein defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.
The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 28 months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond their control stalled the toxicity identification evaluation/TRE. The report shall provide information pertaining to the specific control mechanism selected that will, when implemented, result in the reduction of effluent toxicity to no significant lethality at the critical dilution. The report shall also provide a specific corrective action schedule for implementing the selected control mechanism.

h. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and to specify a chemical-specific limit.

i. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

Port of Corpus Christi Authority of Nueces County TPDES Permit No. WQ0005253000

TABLE 1 (SHEET 1 OF 4)

MYSID SHRIMP SURVIVAL AND GROWTH

		Date Time		Date Time
Dates and Times Composites Collected	No. 1	FROM: _____	TO:	_____
	No. 2	FROM: _____	TO:	_____
	No. 3	FROM: _____	TO:	_____

Test initiated: _____ am/pm _____ date

Dilution water used: _____ Receiving water _____ Synthetic dilution water

MYSID SHRIMP SURVIVAL

Percent Effluent	Percent Survival in Replicate Chambers								Mean Percent Survival			CV%*
	A	B	C	D	E	F	G	H	24h	48h	7 day	
0%												
4%												
5%												
7%												
9%												
12%												

* Coefficient of Variation = standard deviation x 100/mean

DATA TABLE FOR GROWTH OF MYSID SHRIMP

Replicate	Mean dry weight in milligrams in replicate chambers					
	0%	4%	5%	7%	9%	12%
A						
B						
C						
D						
E						

TABLE 1 (SHEET 2 OF 4)

MYSID SHRIMP SURVIVAL AND GROWTH

DATA TABLE FOR GROWTH OF MYSID SHRIMP (Continued)

Replicate	Mean dry weight in milligrams in replicate chambers					
	0%	4%	5%	7%	9%	12%
F						
G						
H						
Mean Dry Weight (mg)						
CV%*						
PMSD						

1. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean survival at 7 days significantly less than the control survival for the % effluent corresponding to lethality?

   CRITICAL DILUTION (9%): _____ YES _____ NO

2. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean dry weight (growth) at 7 days significantly less than the control's dry weight (growth) for the % effluent corresponding to non-lethal effects?

   CRITICAL DILUTION (9%): _____ YES _____ NO

3. Enter percent effluent corresponding to each NOEC\LOEC below:

   a.) NOEC survival = _____% effluent

   b.) LOEC survival = _____% effluent

   c.) NOEC growth = _____% effluent

   d.) LOEC growth = _____% effluent

Port of Corpus Christi Authority of Nueces County TPDES Permit No. WQ0005253000

TABLE 1 (SHEET 3 OF 4)

INLAND SILVERSIDE MINNOW LARVAL SURVIVAL AND GROWTH TEST

		Date Time	Date Time
Dates and Times Composites Collected	No. 1	FROM: _____	TO: _____
	No. 2	FROM: _____	TO: _____
	No. 3	FROM: _____	TO: _____

Test initiated: _____am/pm _____date

Dilution water used: _____ Receiving water _____ Synthetic Dilution water

INLAND SILVERSIDE SURVIVAL

Percent Effluent	Percent Survival in Replicate Chambers					Mean Percent Survival			CV%*
	A	B	C	D	E	24h	48h	7 days	
0%									
4%									
5%									
7%									
9%									
12%									

* Coefficient of Variation = standard deviation x 100/mean

TABLE 1 (SHEET 4 OF 4)

INLAND SILVERSIDE LARVAL SURVIVAL AND GROWTH TEST

INLAND SILVERSIDE GROWTH

Percent Effluent	Average Dry Weight in milligrams in replicate chambers					Mean Dry Weight (mg)	CV%*
	A	B	C	D	E		
0%							
4%							
5%							
7%							
9%							
12%							
PMSD							

Weights are for: ____ preserved larvae, or ____ unpreserved larvae

1. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean survival at 7 days significantly less than the control survival for the % effluent corresponding to lethality?

   CRITICAL DILUTION (9%): _____ YES _____ NO

2. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean dry weight (growth) at 7 days significantly less than the control's dry weight (growth) for the % effluent corresponding to non-lethal effects?

   CRITICAL DILUTION (9%): _____ YES _____ NO

3. Enter percent effluent corresponding to each NOEC/LOEC below:

   a.) NOEC survival = _____% effluent

   b.) LOEC survival = _____% effluent

   c.) NOEC growth = _____% effluent

   d.) LOEC growth = _____% effluent

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: MARINE

The provisions of this section apply to Outfall 001 for whole effluent toxicity (WET) testing.

1. Scope, Frequency, and Methodology

   a. The permittee shall test the effluent for lethality in accordance with the provisions in this Section. Such testing will determine compliance with Texas Surface Water Quality Standard 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.

   b. The toxicity tests specified shall be conducted once per six months for the first year of testing. If all four tests comply with the standard in Item 1.a., the permittee may submit this information in writing and, upon approval, discontinue further testing for the term of the permit. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms," fifth edition (EPA-821-R-02-012) or its most recent update:

      1) Acute 24-hour static toxicity test using the mysid shrimp (*Mysidopsis bahia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

      2) Acute 24-hour static toxicity test using the inland silverside (*Menidia beryllina*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

      A valid test result must be submitted for each reporting period. The permittee must report, then repeat, an invalid test during the same reporting period. The repeat test shall include the control and all effluent dilutions and use the appropriate number of organisms and replicates, as specified above. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

   c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. Except as discussed in Part 2.b., the control and dilution water shall consist of standard, synthetic, reconstituted seawater.

   d. This permit may be amended to require a WET limit, a best management practice, a chemical-specific limit, additional toxicity testing, and other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

2. Required Toxicity Testing Conditions

   a. Test Acceptance - The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.

   b. Dilution Water - In accordance with Part 1.c., the control and dilution water shall consist of standard, synthetic, reconstituted seawater.

c. Samples and Composites

1) The permittee shall collect one composite sample from Outfall 001.

2) The permittee shall collect the composite sample such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.

3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the composite sample. The sample shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

4) If Outfall 001 ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required of this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated.

b. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit for the first year of testing in accordance with Item 1.b..

1) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.

2) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.

c. Enter the following codes for the appropriate parameters for valid tests only:

1) For the mysid shrimp, Parameter TIE3E, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

2) For the inland silverside, Parameter TIE6B, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

d. Enter the following codes for retests only:

1) For retest number 1, Parameter 22415, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."

2) For retest number 2, Parameter 22416, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."

4. Persistent Mortality

The requirements of this part apply when a toxicity test demonstrates significant lethality, here defined as a mean mortality of 50% or greater to organisms exposed to the 100% effluent concentration after 24 hours.

a. The permittee shall conduct 2 additional tests (retests) for each species that demonstrates significant lethality. The two retests shall be conducted once per week for 2 weeks. Five effluent dilution concentrations in addition to an appropriate control shall be used in the retests. These additional effluent concentrations are 6%, 13%, 25%, 50% and 100% effluent. The first retest shall be conducted within 15 days of the laboratory determination of significant lethality. All test results shall be submitted within 20 days of test completion of the second retest. Test completion is defined as the 24th hour.

b. If one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5 of this Section.

5. Toxicity Reduction Evaluation

a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall lead to the successful elimination of significant lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:

1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents

entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;

3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and

4) Project Organization - The TRE action plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.

d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly TRE activities reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;

2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;

3) any data and substantiating documentation that identifies the pollutant and source of effluent toxicity;

4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to eliminate significant lethality; and

6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.

e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.

f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive weeks with at least weekly testing. At the end of the 12 weeks, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 18 months from the last test day of the retest that demonstrates significant lethality. The permittee may petition the Executive Director (in writing) for an extension of the 18-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall specify the control mechanism that will, when implemented, reduce effluent toxicity as specified in Part 5.h. The report shall also specify a corrective action schedule for implementing the selected control mechanism.

h. Within 3 years of the last day of the test confirming toxicity, the permittee shall comply with 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the test organism in 100% effluent at the end of 24-hours. The permittee may petition the Executive Director (in writing) for an extension of the 3-year limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE.

The permittee may be exempted from complying with 30 TAC § 307.6(e)(2)(B) upon proving that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g., metals) form a salt compound. Following the exemption, the permit may be amended to include an ion-adjustment protocol, alternate species testing, or single species testing.

i. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and to specify a chemical specific limit.

j. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

TABLE 2 (SHEET 1 OF 2)

MYSID SHRIMP SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent

Port of Corpus Christi Authority of Nueces County TPDES Permit No. WQ0005253000

TABLE 2 (SHEET 2 OF 2)

INLAND SILVERSIDE SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent

Attachment 3 -
Protestants' Motion for Rehearing

TCEQ DOCKET NO. 2019-1156-IWD

IN THE MATTER OF THE	**§**	**TEXAS COMMISSION**
APPLICATION OF PORT OF	**§**	
CORPUS CHRISTI AUTHORITY OF	**§**	**ON**
NUECES COUNTY FOR TPDES	**§**	
PERMIT NO. WQ0005253000	**§**	**ENVIRONMENTAL QUALITY**

PROTESTANTS' MOTION FOR REHEARING

TO THE HONORABLE COMMISSIONERS:

Port Aransas Conservancy (PAC), James and Tammy King, Sam Steves, and Edward Steves (collectively, Protestants) file this their joint motion for rehearing to the Order issued by the Texas Commission on Environmental Quality (Commission or TCEQ) on December 20, 2022, granting the application by the Port of Corpus Christi Authority of Nueces County (Port). Pursuant to Tex. Gov't Code § 2001.146(a), a motion for rehearing must be filed no later than the 25th day after the date the decision or order that is the subject of the motion is signed. Accordingly, this motion is timely filed.

I. SUMMARY

The Port seeks a permit to discharge up to 110 million gallons per day of effluent into one of the most sensitive waterbodies in Texas. This effluent will have double the salinity of ambient seawater. This would be the first such facility in Texas and the discharge would occur adjacent to one of only five major passes along the Texas coast, which are disproportionately ecologically valuable because they are the conduits between the Gulf of Mexico and coastal estuaries.

After a 5-day hearing on the Port's Original Application in 2020 (the Initial Proceeding), the Administrative Law Judges (ALJs) recommended denial; the Commission remanded, disagreeing with the judges and the uncontroverted evidence and ordering that a "no significant lethality" legal standard be applied on remand, and additional evidence be taken on referred issues. On remand, the Port entirely ignored the scope of the Commission's Remand Order and submitted a new application with a new discharge location. This was improper, as the Commission's Remand Order defined and limited this proceeding on remand, as discussed in more detail further below.

Remarkably, the 108-page PFD issued by the ALJs did not explicitly state whether the Port carried its burden to prove there would be "no *significant* mortality" to organisms passing through the Zone of Initial Dilution (ZID). Instead, the ALJs concluded that a salinity limit in the permit would suffice in helping the applicant meet its burden of proof. Namely, the ALJs stated that the preponderance of the evidence *does not* demonstrate the Revised Draft Permit would ensure that salinity gradients in the estuary would "be maintained to support attainable estuarine dependent aquatic life uses" or that careful consideration was "given to all activities that may detrimentally affect salinity gradients."[1] But, rather than recommending denial, the ALJs simply recommended a permit limit on salinity.

So, instead of analyzing the evidence and determining that the Port had affirmatively proven there would be no significant mortality to organisms passing through the ZID, the ALJs simply concluded that adding some permit limitations would remedy any potential problems. The Commission agreed with the ALJs and added additional requirements in the Revised Draft Permit approved by the Commission's Order. However the additional requirements alone are insufficient to make the Revised Draft Permit protective of the marine environment and the living things that depend on that environment. The preponderance of the evidence does not demonstrate that the additional requirements will remedy the numerous deficiencies in the Port's New Application or the Revised Draft Permit. The Revised Draft Permit should not be issued, even with the additional requirements, and the Commission's Order approving the Revised Draft Permit is based upon many substantive and procedural errors that make it indefensible and improperly issued.

II. DISCUSSION

There are many procedural and substantive errors underlying the Commission's Order in this docket. Those errors are discussed below.

A. Error No. 1: The Commission Directed the ALJs to Apply, and Did Itself Apply, an Incorrect Legal Standard for Lethality.

When it remanded this case for a second hearing, the Commission instructed the ALJs to apply the "no significant lethality" standard found in 30 Texas Administrative Code § 307.6(e)(1).

[1] PFD at 89 (quoting 30 Tex. Admin. Code § 307.4(g)(3)). Unless otherwise noted, all citations to "PFD" are to the final proposal for decision issued by the ALJs on June 20, 2022, after the Commission's remand.

But, as the ALJs wrote in the original PFD, that section governs "total toxicity" or "standards related to toxicity testing of effluent."[2] The correct standard is found in sections 307.6(c)(6) and 307.8(b)(2): "no lethality to aquatic organisms that move through a ZID." In 2020, every witness to testify agreed that "no lethality" was the correct standard. That included the Port's expert witness, Lial Tischler:

> Q: Is it your understanding that the rules of TCEQ require no lethality even at the zone of initial dilution?
>
> A: Yes, you mean within the zone of initial dilution?
>
> Q: Yes.
>
> A: The answer is yes.[3]

And the ED's witnesses, such as Dr. Wallace:

> Q: The regulations, TCEQ regulations, actually dictate that for this discharge, there has to be no death anywhere, even in the zone of initial dilution, isn't that right?
>
> A: Actually, that's for all permits, ma'am.
>
> Q: So is that a "yes," that there can be no death?
>
> A: Yes, but it applies to all permits.
>
> Q: Okay. And in order to complete your antidegradation review in the manner that you did, you had to conclude that this discharge will cause no death, right?
>
> A: That's what I concluded, yes.
>
> Q: Even in the zone of initial dilution?
>
> A: Yes.[4]
>
> . . . .

[2] Feb. 5, 2021 PFD at 9.

[3] Tr. Vol. 3 at 245.

[4] Tr. Vol. 5 at 178:16-179:5.

Q: In this antidegradation review, was there any considera- -- besides human health concerns, was there any concern for any effects on oysters themselves, just as a marine creature?

A: They were considered as part of the exceptional aquatic life use, yes.

Q: Okay. So they're not supposed to die as a result of this discharge, either, are they?

A: No.[5]

The ALJs originally applied the correct legal standard and the ALJs' original recommendation for denial was based on the failure by the Port to meet that correct legal standard. The permit should have been denied. Instead, the Commission committed error by failing to deny the permit after the first hearing and applying an incorrect legal standard on remand, and then issuing the Order approving the permit.

B. Error No. 2: The Commission Failed to Evaluate This Permit Application as for a Major Facility.

In issuing its Order, the Commission relied on the ED's evaluation of the permit which treated the proposed permit as being for a minor discharge. This is clearly erroneous. The United States Environmental Protection Agency (EPA) determined and advised the ED that the permit must be treated as a major discharge under federal rules that apply to TCEQ permitting.

One of the first steps in the TCEQ's review process is to determine whether a permit is "Major" or "Minor." This should be relatively straightforward but, according to the EPA, the ED miscalculated the points assessed under the EPA Permit Rating Worksheet for determining what is a Major permit by at least 35 points,[6] and incorrectly classified the discharge as Minor when it is actually Major.

Whether an application is Major or Minor directly impacts 1) the type of review that TCEQ must conduct as part of its application review process,[7] and 2) whether the TCEQ Draft Permit

[5] Tr. Vol. 5 at 170-171.

[6] Just by way of example, the ED failed to assign 10 points for a facility located in an estuary in the National Estuary Protection Program. Ex. ED-SG-8 (TPDES Permit Major/Minor Rating Work Sheet). That is a verifiable fact that is not in dispute and allows for no discretion.

[7] Remand Tr. Vol. 9 at 2260:21-24 (Ms. Gibson testifying that "discharges of processed wastewater undergo a slightly heightened review with the water quality assessment and made sure there are additional permitting requirements.").

must be provided to EPA for its review and its right to object to terms or issuance. EPA's stated concerns are not limited solely to the Major/Minor determination. EPA also raised concerns regarding total dissolved solids (TDS), sulfates, and chlorides, the Tier 2 Antidegradation Review process, and WET testing requirements—each of which are clearly relevant to one or more referred issues.[8]

The definitions of Major and Minor come from federal regulations, developed and overseen by EPA, and the evaluation is made by the ED using an EPA-promulgated worksheet. The EPA objection letter states that the ED's permit review fell short of compliance with applicable federal regulations and the Draft Permit would "not be a validly issued NPDES permit" if issued without addressing all of EPA's concerns. Commission staff have admitted to knowing that EPA is not satisfied with their response, but they simply do not care.[9]

EPA has also told TCEQ that going forward *all* desalination facilities should be classified as Major facilities.[10] Yet the TCEQ has simply ignored that directive.[11] In choosing not to classify the desalination facility as "major," TCEQ has failed to conduct a "heightened review with the water quality assessment" and failed to include "additional permitting requirements" that apply to major facilities.[12] This is error and renders the permit decision invalid and unsupported. In open meetings, the Commissioners have appeared to suggest that EPA acted in a dilatory manner by raising this concern late. To be clear, EPA raised the issue promptly after it was made aware of the ED's mischaracterization—the failure was not of the EPA, but of the ED in failing to notify the EPA of the application and the "minor facility" characterization the ED was giving the application. There is nothing to suggest EPA acted in a dilatory fashion; to the contrary, it acted properly to notify the ED of its objections as quickly as it became aware of the issue.

C. Error No. 3: The Modeling Does Not Comply with Applicable Regulations nor Ensure the Revised Draft Permit is Protective of Water Quality, Utilizing Accurate Inputs.

The evidence does not support the issuance of the permit. The modeling and the data underlying it are inaccurate and, thus, as a matter of law they are unreliable. A permit decision is

[8] Ex. PAC 89-R.

[9] Remand Tr. Vol. 9 at 2233:16-23, 2254 - 2258.

[10] Remand Tr. Vol. 9 at 2258:6-11.

[11] Remand Tr. Vol. 9 at 2259:8-23.

[12] *See* Remand Tr. Vol. 9 at 2260.

only as good as the evidence used to support it. Yet in this case, the Commission has simply ignored significant factual inaccuracies in the evidence the Commission relies on to support issuance of the permit. This is error.

Channel Depth: The Port's Original Application identified the channel depth at the discharge location as 63 feet even though the actual depth was close to 90 feet.[13] The "depth at discharge is a *required input* for the CORMIX model and is a variable that influences near-field mixing predictions."[14] Despite this clear error, an error that the Port identified months before the Contested Case Hearing began, the Port did not correct its application or use the correct depth in its modeling. Rather than denying the permit for such failure to correct the obvious and significant error, the Commission remanded the matter to allow the Port to correct that specific error. Yet, on remand, the Port made the exact same type of error again.

The Port's bathymetry shows that the depth at the new location of the discharge is actually 65 feet.[15] But the Port and the ED used 90 feet as the CORMIX input for water depth.[16] No one contends that 90 feet is the actual depth at that location. Even the ALJs concede this fact.[17] To be clear "CORMIX's conservative module requires the modeler to select *a single value*" for depth of discharge."[18] This single value requirement does not allow the applicant to ignore the actual depth where the discharge will take place for the use of any depth that happens to occur within the entire waterbody at a location arbitrarily selected by the modeler. The Commission remanded for accurate information on the depth of the channel at the location of the discharge yet the Port has arbitrarily chosen a depth—one that is, as conceded by the ALJs, not the depth at the actual location of the discharge. Moreover, 90 feet is not even the deepest part of the channel in that area, as the Port's own bathymetry map shows a depth of 95 feet in the same area. Yet the Port did not use the actual depth at the location of the discharge, nor the deepest depth in the area, but simply chose an

[13] "While the CORMIX model is not a perfect representation of actual conditions, the results of the model are only as reliable as the accuracy of its inputs, with recognition of its limitations. In this case there is really no dispute that the inputs into the CORMIX model for channel bathymetry are not accurate. The evidence is conclusive that the depth of the channel at the outfall location is close to 90 feet, but the modeling used an input of 63 feet." Feb. 5, 2021 Proposal for Decision, at 30.

[14] PFD at 16 (emphasis added).

[15] PFD at 36.

[16] PFD at 17.

[17] PFD at 17.

[18] PFD at 36.

arbitrary number to include in the application. If the Commission remanded before for this same type of error, it must still recognize that this evidence cannot be relied upon to support permit issuance.

Ambient Velocity and The Eddy: The ALJs noted that in the Initial Proceeding "it was undisputed" that an eddy occurred near the outfall location.[19] The Port's witnesses – and its lawyers – repeatedly told the ED, the ALJs, and the Commissioners that there was an eddy, as an affirmative fact.[20] But they did not stop there – they relied on that eddy for the hypothesis (never tested by the Port's many experts) on which they expected everyone to rely in granting a permit: "our expert testimony provided this in the record – that that eddy and that localized increase in depth enhances the mixing, and makes, makes existing modeling more conservative."[21] On remand, the Port now says it has disproven the existence of an eddy.[22] But that is not what the ALJs determined. The ALJs concluded that it was unclear whether there was an eddy and what its impacts might be.[23] The ALJs noted that an eddy "could enhance mixing, but alternatively, [] it could trap organisms and lengthen exposure times."[24] Despite the ALJs' acknowledgment of uncertainty, there is no attempt in the record to reconcile this uncertainty with the finding that exposure time for any organism will be no more than minutes. This uncertainty is fatal to the permit.

Bathymetry, Critical Conditions, and Margin of Error: The ALJs noted that the ED's critical conditions are not the worst-case scenario for salinity, and then concede that this "calls into question whether the critical conditions derived from the modeling are protective of aquatic life with respect to salinity."[25] In other words, for this first-of-its-kind facility, where salinity is the constituent of concern, we know the ED ignored the modeling results specifically for salinity in setting the Permit Limit. That does not create merely a "question." If the modeling cannot provide the worst-case scenario for salinity, or if the ED cannot or will not correctly interpret the modeling,

[19] PFD at 38.

[20] Certified Transcription May 19, 2021 Commission open meeting at 46:8-14.

[21] *Id*.

[22] PFD at 26.

[23] PFD at 38-39.

[24] *Id*.

[25] PFD at 40.

the result is the same: the modeling, either by design or because of improper utilization, **is not protective of water quality**. But it gets worse, because this problem is compounded by two other findings by the ALJs. The PFD states that the site-specific bathymetry – the outcroppings (the "cove") and the 90' hole – "introduce *some uncertainty* into the CORMIX modeling results."[26] Said more plainly, when CORMIX predicts 14.6% effluent at the edge of the ZID, we have no idea how close that is to the real world mixing that will occur. Does "some uncertainty" mean that maybe, under some conditions, it will really be 20%? Or 40%? Or 60%?

Finally, CORMIX has a 50% margin of error, meaning that when the modeling predicts 14.6% effluent at the edge of the ZID, in reality that may end up being as high as 21.9%.[27] Perhaps rarely. Perhaps all day, every day. Unfortunately, there is no way to know whether the discharge actually meets the effluent percentage limits at the mixing zone boundaries. As the ALJs have already pointed out, those effluent percentage limits are solely based on the CORMIX model outputs, not on actual measurements of effluent at the mixing zone boundaries. Despite knowing that the effluent percentage limits can never actually be measured, the ED argues that the permit "does not authorize the exceedance of the modeled effluent percentages when they are used to set permit limits."[28] In other words, when the Port's desalination facility discharges up to 110 million gallons a day of hyper-saline brine into the Corpus Christi Ship Channel, despite the inability to actually measure effluent percentages at the mixing zone boundaries, all these modeling uncertainties, and the 50% CORMIX margin of error, the Port and the ED would have you believe that there will not be 21.9% effluent at the edge of the ZID, simply because the Revised Draft Permit says so. The Revised Draft Permit is unsupported by the evidentiary record.

D. Error No. 4: The Executive Director's Anti-Degradation Review Was Not Accurate or Reliable.

The Tier 1 antidegradation review requires that "[e]xisting uses and water quality sufficient to protect those existing uses must be maintained."[29] The Tier 2 antidegradation review requires that (1) water quality not be lowered by more than a de minimis amount;[30] (2) salinity gradients in

[26] PFD at 39.

[27] PFD at 34.

[28] PFD at 40.

[29] PFD 41; 30 Tex. Admin. Code § 307.5(b)(1).

[30] PFD 41; 30 Tex. Admin. Code § 307.5(b)(2).

estuaries be maintained to support attainable estuarine dependent aquatic life uses; and (3) careful consideration be given to all activities that may detrimentally affect salinity gradients.[31]

This case was remanded so the ALJs could take additional evidence on whether the ED's antidegradation review *was* accurate. No such evidence was presented. Instead, the ED tossed its original antidegradation review, replaced the anti-degradation reviewer, and conducted a new and different review of a new application.[32] One step in this new review process "was to assign critical conditions for the outfall location" – ironically, these are the same critical conditions that the PFD states are not the worst-case scenario for salinity.[33]

The ED's new antidegradation review was performed by Mr. Schaefer, an aquatic scientist at TCEQ, and the Team Leader of the Standards Implementation Team.[34] Despite his experience and position, Mr. Schaefer could not even define "salinity gradient" or "*de minimis*"—two key terms essential to the antidegradation review under the applicable law. He could provide no explanation whatsoever, including his own plain-English definition of the standard that he is tasked with enforcing. When asked in the comfort of his own office, "What is the definition of *de minimis*?" he replied, "*De minimis* is not defined by the Texas Water Code, the Texas Administrative Code or the Implementation Procedures (IPs)."[35] This non-answer implied what he more explicitly stated live at hearing when he was asked, "Do you have a definition of d*e minimis* that you used in your review?" He answered, "No. I don't."[36] He was simply unable to define the very standard that, in his expert opinion, the Port had clearly met.

As to the definition of "salinity gradient," his testimony is slightly less stark. Although he had earlier been deposed regarding his definition of this term, he offered no prefiled direct testimony regarding it. In hearing, he said, "I don't know the precise definition, no, sir."[37] He also acknowledged not knowing if the time over which the change in salinity occurs was a component of the definition.[38] If one does not know whether a gradient is measured over time or is measured

[31] PFD at 41; 30 Tex. Admin. Code § 307.4(g)(3).

[32] PFD at 53.

[33] PFD at 40, 42.

[34] PFD at 42.

[35] Ex. ED-PS-1-Remand, at 24:28-30.

[36] Remand Tr. Vol. 9, at 2384:9-11.

[37] Remand Tr. Vol. 9, at 2349:21.

[38] Remand Tr. Vol. 9, at 2350:5-6.

over distance, it is a stretch to find that that person has even a general understanding of the "gradient" concept embodied in the Water Quality Standards. Mr. Schaefer's counsel did not explore his understanding of either term in re-direct examination.

The ALJs, nonetheless, credit Mr. Schaefer with "a general understanding of the concepts."[39] That is like saying that someone with a general understanding of electricity could rewire your house. Or someone with a general understanding of dentistry could give you a root canal. The ALJs' disregard of Mr. Schaefer's lack of knowledge or understanding of the essential elements of an antidegradation review is shocking.

Moreover, "he indicated that by following the IPs' guidance, he can ensure no more than de minimis degradation."[40] Then he described the steps he took to follow the IPs. In other words, he has a recipe – and he followed it. Mr. Schaefer is worth quoting at some length because his testimony demonstrates the ad hoc nature of his approach and that, contrary to the PFD,[41] he *did not* consider the only existing actual testing data to show the impacts of salinity on aquatic life—Dr. Nielsen's data. Perhaps he used Dr. Wallace's gazing ball and could see what would come out in the future merits hearing:

> A. Okay. So like I said, it started out looking at the Texas Water Development Board paper and that *gave me an idea*, okay, so what's a tolerance for organisms that are going to be found in this area, red drum, which everyone has been talking about, stood out, and looking at the – *the optimal range that was given in that of 20 to 35 ppt*, I've calculated the effluent percentage at *the edge of the mixing zone*. It was within that – that level, and then, of course, looking at the SUNTANS modeling, the WET data results, and then the additional information that this hearing has brought out has kind of fallen in line like the Nielsen – *of course, I didn't use that in my initial review* but the Nielsen data on the red drum, that sort of falls into place with the water development board results and kind of gives me more assurance that *at the edge of that aquatic life mixing zone, we're going to be within that range of tolerance for those, the red drum*. Looking for areas within the ZID, within the mixing zone, that's where the whole effluent toxicity data comes into play.

[39] PFD at 46.

[40] PFD at 47. The IPs do not contain the terms "de minimis" or "salinity gradient." The IPs have never before been used to evaluate a permit for discharge from a marine desalination facility.

[41] PFD at 47 (listing consideration of Dr. Nielsen's data as part of Mr. Schaefer's "process" without citation to the record).

Q. Understood. So at the edge of the aquatic life mixing zone, I believe that you used an 8.9 percent effluent – an effluent –

A. Percentage?

Q. Percentage. Thank you, sir. Is that accurate?

A. That is correct.

Q. And where did you get that number from?

A. From the critical conditions memo.[42]

So his "process" was actually as follows: Mr. Schaefer looked at the TWDB paper and found that it says the "optimal range" of salinity for red drum is 20-35 ppt. Except that is incorrect. The TWDB paper does not use the word "optimal" with respect to red drum at all. It states that red drum survived from hatching to two weeks and grew equally well in 15-30 ppt water.[43] And Figure 24 provides the range of salinity that will result in "no salinity related mortality during the pelagic larval stage." For red drum the upper limit is not 35; it is 33 ppt.[44] So, one of his initial considerations was simply wrong.

Mr. Schaefer says that he then calculated the effluent at the edge of the mixing zone at 8.9% effluent. He did no such calculation – that 8.9% is the CORMIX result produced by Ms. Cunningham and the Port. He testified that if those results were not accurate, he would want to "revisit" his antidegradation review.[45] Well, as the PFD states, those results are in fact unreliable. Of course, Mr. Schaefer could not have known that – or accounted for the inability to model for the site-specific bathymetry, the failure to use the worst case scenario in developing the critical conditions, and the CORMIX margin of error – when he performed his review. And he does not claim he did. He simply accepted the CORMIX results as gospel.

Next Mr. Schaefer "looked" at the SUNTANS modeling – which was prepared for the first hearing and not redone with the new application information. This is the model that capped each cell's salinity increase at 1% above ambient cell salinity, that schematized the ship channel very differently from the actual geometry of the channel, and for which "it is not possible to develop

[42] Remand Tr. Vol. 9 at 2384:20 - 2385:24 (emphasis added).

[43] EX PAC-85R at 55 (Bates Port Authority 041392).

[44] EX PAC-85R at Fig. 24 (Bates Port Authority 041408).

[45] Remand Tr. Vol. 9 at 2386:3-6.

quantitative metrics for assessing the SUNTANS model's performance,"[46] i.e., to validate its results quantitatively. Dr. Furnans formed the qualitative opinion that the SUNTANS model "may over predict actual bay salinity,"[47] but this is the same authority who was willing to opine on salt-flux ratios on the basis of another model that has been proven unreliable. The input used for calculating the salt-mass flux through the diffuser was not "potentially" wrong; it was verifiably wrong by a factor of 10. This is a fact. Clearly, Dr. Furnans' failure to use the correct data in his analyses – and the failure of the Port or of Dr. Furnans' colleagues to have used a sound QA/QC check of the data – calls into question Mr. Schaefer's judgment in trusting the "integrity" of Dr. Furnans' salt-flux analysis.

Mr. Schaefer also took as relevant and weighty Dr. Furnans' aforementioned salt-flux analysis. To date, no one has explained how this analysis, even had it been executed correctly, leads to findings regarding salinity gradients or changes in salinity gradients. The PFD diverts attention from the salt-flux-analysis on which Mr. Schaefer relied by shifting the burden from the Port and the agency to Protestants, stating: "no one questioned Dr. Furnans or any other witness about it. Nor did PAC offer other exhibits explaining this error or offering a different analysis."[48] But this discussion wholly misses the point. The Port's error is clearly in the evidentiary record and means that the salt flux data was completely unreliable for any purpose.

Further, the ALJs opined, with no record support, that such an increase "does not seem" to result in degradation and "would not necessarily raise the salinity level of the receiving water to an alarming level."[49] Neither of these is the correct legal standard the Port is required to meet. Lay persons guessing about degradation and the mere possibility that salinity levels would not be raised above "alarming levels" is not sufficient to demonstrate that no degradation has occurred.

The PFD asserts that it was within Mr. Schaefer's "discretion to *heavily discount* the outlier CORMIX runs" offered by PAC.[50] But that is not what Mr. Schaefer testified to. When asked

[46] Ex. APP-JF-13 and Ex.. APP-JF-1, p.15:7-8. Additionally, there is only one reference point against which to judge the SUNTANS model's ability to reflect salinity changes over time, and that reference point is not in the Bay but, rather, is in Aransas Pass, almost in the Gulf of Mexico. *See*, Ex. APP-JF-13, Figure 1 and related text.

[47] Ex. APP-JF-1, p. 15:10-11.

[48] PFD at 51.

[49] PFD at 51.

[50] PFD at 48.

whether he considered the salinity concentrations projected by PAC's witnesses, Socolofsky and Osting, he stated unequivocally that he did not consider them and discounted them "to zero."[51]

The PFD asserts for a second time that Mr. Schaefer "considered Dr. Nielsen's study" in his weight of the evidence review.[52] In fact he testified at the merits hearing that he *did no such thing*: "and then the additional information that this hearing has brought out has kind of fallen in line like the Nielsen – of course, I didn't use that in my initial review."[53] It appears the PFD is approving of a practice where ED witnesses attend the hearing and then backfill their deficient processes and reviews with new information they cherry pick from the merits hearing.

Finally, the PFD states that the unwritten process used by Mr. Schaefer was not "too vague" because he began to explain it but "was cut off . . . the questioning went in a different direction."[54] The PFD concludes that Mr. Schaefer "did not get the opportunity to finish that discussion."[55] This is remarkable. The ALJs control the proceeding, not the parties. Again, the ALJs have shifted the responsibility to PAC for things that the law and the process do not place upon PAC. Once Mr. Schaefer's review was shown lacking, it was the ED's job to defend the antidegradation review and weight of the evidence "process." After Mr. Schaefer was "cut off" during cross examination, the ED's counsel took him on re-direct and elected to not create any record at all of what constitutes an adequate weight of the evidence review.[56]

The anti-degradation review was no real review at all, and the decision to rubberstamp it as adequate reflects a desire to simply push this permit along rather than ensure that it satisfied all applicable standards and will be protective of aquatic life. Without reliable evidence and a defensible anti-degradation analysis, the Revised Draft Permit has not been shown to satisfy the applicable standards.

[51] Remand Tr. Vol. 9 at 2361:2-5 & 2361:20-23.

[52] PFD at 48 (there is no citation to the record to support this assertion).

[53] Remand Tr. Vol. 9 at 2385:5-8.

[54] PFD at 49.

[55] PFD at 49.

[56] Remand Tr. Vol. 9 at 2387-91 (Re-Direct examination of Mr. Schaefer by ED).

E. Error No. 5: The Commission Improperly Ignored that the Proposed Discharge will Adversely Impact the Marine Environment, Aquatic Life, and Wildlife, Including Birds and Endangered or Threatened Species, Spawning Eggs, or Larval Migration.

The ALJs recognized that the Corpus Christi Ship Channel (CCSC) plays an important role in sustaining populations of estuarine-dependent marine species and the Port's proposed discharge site is in a sensitive area.[57] High salinity or saline imbalances can be fatal to aquatic life, particularly the early life stages that will pass through the ZID.[58] It is not possible to simply compare the data on acceptable salinity ranges for aquatic organisms with the predicted salinity concentrations produced by the modeling – because the modeling results are "uncertain."[59] Are they wrong by a little or a lot? Admittedly, no one knows.

Ignoring the uncertainty shown in the evidence, the ALJs conclude, without evidentiary support, that exposure will be no more than "seconds and minutes."[60] But even if this is wrong, the ALJs appear to believe that the WET testing required by the Draft Permit is an insurance policy that will protect against potential harm from the discharge. But, this is wrong.

The 24-hour acute testing requires "greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period."[61] To be clear, everyone understands that this requirement means the Facility could operate for months, degrading water quality and causing significant lethality, before the testing would reveal that.

While the Port may have been reasonable for using standard species in its WET testing, we know that red drum are more sensitive than those species, particularly in the early life stages.[62] The only person to test red drum larvae, and the only person to test for the impacts of a salinity concentration of 100 percent effluent (as required by the Draft Permit), is Dr. Nielsen. Her LT50 testing showed that, when exposed to 100% effluent, larvae spawned at 28 ppt began dying after only 4 minutes, and half were dead after 48 minutes.[63] Similarly, when exposed to 100% effluent,

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[57] PFD at 84.

[58] PFD at 84.

[59] PFD at 39.

[60] PFD at 88.

[61] Admin Record Tab K at Page 31 (Bates 00031).

[62] PFD at 85.

[63] PFD at 59-60.

larvae spawned at 35 ppt began dying after 10 minutes, and half were dead after 55.4 minutes.[64] The ALJs found that testing reliable.[65] So, while we do not have comparable results for the Port's test species (because it only tested salinities up to 55 ppt – substantially lower than the 68.7 ppt of 100 percent effluent), it is clear the Facility would "fail" the required 24-hour acute test if red drum were used. We know that. Today. The Port has not in any way carried its burden on this issue.

Experts for both the Port and PAC relied on the TPWD study and the PFD discussed it in considerable detail.[66] So let us examine the TPWD paper vis-à-vis the Draft Permit's requirements for acute testing. In the TPWD study, red drum larvae of different ages, ranging from 1-day to 9-days, were subjected to 18-hour salinity tolerance tests with concentrations ranging from 0 ppt to 50 ppt.[67] For every age, mortality was much greater than 50% at 48 ppt. Thus, the TPWD study showed that salinity far less than required for the Draft Permit's acute testing, killed far more than half the subjects, well before the 24 hour mark. The "best" result at 50 ppt was for 5-day old red drum, with a 4.76% survival rate.[68] We do not need to look into a gazing ball. We have the data that tells us what the WET test results would be, if it were performed competently, using red drum. We know that. Today. The Port has not in any way carried its burden on this issue.

The PFD acknowledges these facts in a rather understated way: "the evidence shows that some mortality could occur due to abrupt changes."[69] Mr. Schaefer relied on the TPWD study for his "optimal salinity level." Dr. Fontenot relied heavily on the TPWD study for his Effects Assessment Exhibits – he relied on that study exclusively for the salinity tolerance range of red drum larvae in Exhibit EFA 1-1. Yet there is no analysis at all nor any attempt to explain how mortality of more than 95% for all ages of red drum larvae[70] exposed to 50 ppt in the 18-hour test would not be "significant lethality."

Ultimately the ALJs concluded that the preponderance of the evidence does not demonstrate the Draft Permit would ensure compliance with the TSWQS.[71] To remedy this failure,

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[64] PFD at 60.

[65] PFD at 86.

[66] This is also called the "Thomas" study. Ex. PAC-85R; PFD at 63, 67, 72, 86.

[67] EX PAC-85R at 62, Table 12 (Bates Port Authority 041399).

[68] EX PAC-85R at 62, Table 12 (Bates Port Authority 041399).

[69] PFD at 89.

[70] That is 100% for larvae age 1-day, 3-days, and 9-days.

[71] PFD at 89.

the ALJs propose a limit on salinity.[72] The ALJs note that "[t]he question is what limit is appropriate."[73] To arrive at their recommendation, the ALJs simply surveyed the parties' various proposals.

The Port cited to other state and international standards. But simply lifting any standard from some other jurisdiction ignores the fact that those standards are not tailored to *this* marine environment and the aquatic life found *here*. It ignores the site specific conditions. While the record contains some evidence regarding marine desalination facilities outside Texas, *none* of them discharge in a similar location – in proximity to a pass that links a bay to an estuary.

The 2.0 salinity limit recommended by the ALJs as a cap on the increase in salinity at 100 meters from the discharge was first noted in the 2018 joint report of the General Land Office and Texas Parks and Wildlife Department on seawater desalination in Texas.[74] TPWD provided that same recommendation in its specific comments on the Port's application in this case.[75] It has been adopted at seawater desalination discharge permits in other locations. It has been endorsed by one of the Port's experts and even called too lenient by another of the Port's experts. Protestants supported the limit if a permit were issued but continued to oppose any permit due to the deficiencies in application, modeling and a number or uncertainties, including the location of the proposed discharge.[76]

The PFD agreed that there were numerous deficiencies and uncertainties – for example, regarding the eddy and the modeling, among others – and proclaims that they are all remedied with a salinity limit. But this one additional term, in isolation, does nothing to make the Draft Permit more protective within 100 meters, within the ZID where marine organisms will contact 100% effluent. Moreover, the Port admits, and PFD acknowledges, that the proposed facility does not meet this standard for 50% recovery and the 95th percentile salinity.[77]

Because the Port has failed to meet its burden to prove the Revised Draft Permit would satisfy the TSWQS – because there will be adverse impacts on the marine environment and aquatic

[72] PFD at 89.

[73] PFD at 90.

[74] Ex. PAC 7 at 5, 18.

[75] Ex. PAC 37 at 2.

[76] Moreover, the PFD notes on pages 102-3 a list of eleven changes to the permit that Protestants assert are necessary to mitigate the harm from the errors in modeling and environmental evaluations by the Port and ED.

[77] PFD at 90.

organisms – the permit should be denied. The Commission has erred by approving the Revised Draft Permit in the absence of clear evidence supporting it.

F. Error No. 6: The Commission Improperly Ignored that the Proposed Discharge Will Adversely Impact Recreational Activities, Commercial Fishing, or Fisheries in Corpus Christi Bay and the Ship Channel.

For all of the same reasons that there will be adverse impacts on the marine environment and aquatic organisms, there will be adverse impacts on recreational activities, commercial fishing, and fisheries. A permit limit of 2.0 ppt at 100 meters from the discharge will do nothing to diminish the significant mortality that will occur within 100 meters of the discharge.

Scott Holt testified (as did others) that during spawning, there are 100 red drum larvae per 100 cubic meters of water.[78] The TPWD study leads to a reasonable inference that there could be virtually 100% mortality to red drum larvae exposed to 50 ppt or greater. Thus the preponderance of the evidence shows there will be significant mortality within the ZID, and due to the importance of the CCSC in the life cycle of the red drum and other estuarine dependent species, that mortality will have a material and lasting impact on the recreational and commercial fishing stock within a few years.

G. Error No. 7: The Commission Improperly Accepted an Incomplete, Inaccurate, and Erroneous Application with False Representations Contained therein.

This matter was remanded for the ALJs to take additional evidence on (1) whether the Application, and representations contained therein, are complete and accurate, and (2) the depth of the channel, site-specific ambient velocity, and the depth of the diffuser. On this referred Issue, here is what the Original PFD said:

> Protestants and OPIC contend that the Application inaccurately identifies the channel depth at the outfall location as 63 feet, when the actual depth is closer to 90 feet. The channel depth is an input to the CORMIX model, so this issue is discussed above in connection with Issue G. For the reasons discussed there, the ALJs conclude that the channel depth provided in the Application is not accurate.[79]

At the time that was written, everyone understood and agreed that "the channel depth at the outfall location" actually meant the channel depth at the location where the Port told the world

[78] Ex. PAC-46R at 13:20-23.

[79] Feb. 5, 2021 PFD at 78.

it intended to install the outfall. But on remand that simple, basic concept has been turned on its head.

The depth of the channel and depth of the diffuser should not be matters of opinion; they are verifiable facts that were supposed to be corrected definitively on remand. The original PFD correctly observed that 63 feet is not 90 feet. Easy.

ED witness Katie Cunningham described the problem on remand clearly and succinctly in her testimony. The June 24, 2021 memo from Dr. Tischler states that the depth at the discharge location is approximately 90 feet. But the depth of the diffuser barrel, as depicted in the bathymetry map included with that memo, is 65 feet.[80]

But instead of saying, again – 65 feet is not 90 feet – the PFD provides that "both the ED and the Port Authority *agree* that the outfall will discharge 64 or 65 feet below the surface and would be within 68 to 70 feet of water on four-to-six feet risers."[81] That still contradicts the Figure 1 bathymetry map submitted with the New Application.[82] That map shows the Proposed Discharge Location at a spot between two depths: 65.0 and 63.4 feet. Depths of 68 and 70 feet are not reflected anywhere near that proposed location. But now we have a new standard. Correct and verifiable facts need not actually be contained in the Application and supported with data. The Applicant and ED only need to *agree* – "that the world is flat, that the moon is made of green cheese, or that the Earth is the center of the solar system."[83]

The PFD tells us that now the ALJs agree that the diffuser barrel will be put in an area within 68 to 70 feet depth[84] – and also that "this area will be *in front of* the 90-foot depression."[85] The bathymetry map does not actually show a 90 foot depth anywhere. According to the Port's bathymetry map, "this area will be in front of" depths of 81.7 feet, 95.1 feet, 88.2 feet, 68.0 feet, and 60.7 feet. Why aren't any of those the "correct" depth? Apparently because the Port and ED "agree" they are not. The effluent will discharge in that southerly direction during the supposedly

[80] PFD at 96; Ex ED-KC-1 Remand at 0008.

[81] PFD at 97.

[82] PFD at 97; AR-R 4 Admin Record – Remand Tab I at Figure 1 Diffuser Location (Bates 00254).

[83] *E.I. du Pont de Nemours & Co. v. Robinson*, 923 S.W.2d 549, 558 (Tex. 1995).

[84] PFD at 97.

[85] PFD at 97.

infrequent and brief slack tides.[86] The effluent will flow east and west during much more frequent incoming and outgoing tides, and depths in those directions range from 45.5 feet to 78.3 feet. Why aren't any of those the "correct" depth? Apparently because the Port and ED simply "agree" they are not.

How were Protestants and their experts to know the "correct" depth when they conducted their modeling? Apparently, they weren't. They had to sit tight for the big reveal, when the Port submitted rebuttal testimony. This really begs the question – why "require" the Application to be correct, or have a hearing at all if the Applicant and ED can simply "agree" to a set of facts that contradict the facts contained in the Application and supporting materials? And that also contradict the facts presented in written discovery and depositions. One thing is very clear: the location of the discharge has been identified as 90 feet in the Application, yet now everyone agrees it is actually in a location where the depth is somewhere between 65 and 70 feet. This is a fact. The New Application is wrong. Yet, apparently facts do not matter and one of the reasons the Commission remanded to the ALJs has now been disregarded as irrelevant. The Application is not accurate and the Commission erred in issuing an Order based on it.

H. Error No. 8: The Remand Proceeding Exceeded the Clear Scope of the Commission's Remand Order.

Under the rules, the Commission "may order the judge to reopen the record for further proceedings on *specific* issues in dispute."[87] If the Commission does this, its order "shall include instructions as to *the subject matter* of further proceedings and the judge's duties in preparing supplemental materials or revised orders based upon those proceedings."[88] Therefore, the scope of the remand is defined, and limited, by the Commission in its order reopening the record.

In its Remand Order, the Commission identified two purposes for the Remand: (1) for the ALJs to apply a different legal standard for evaluating non-numeric criteria; and (2) for the ALJs to "take additional evidence on" the following issues:

- Whether the *proposed* discharge will adversely impact the marine environment, aquatic life, and wildlife, including birds and endangered or threatened species, spawning eggs, or larval migration;

[86] PFD at 70.

[87] 30 Tex. Admin. Code § 80.265 (emphasis added).

[88] 30 Tex. Admin. Code § 80.265 (emphasis added).

- Whether the *proposed* discharge will adversely impact recreational activities, commercial fishing, or fisheries in Corpus Christi Bay and the ship channel;

- Whether *the* Application, and representations contained therein, are complete and accurate;

- Whether *the* modeling complies with applicable regulations to ensure *the* Draft Permit is protective of water quality, including utilizing accurate inputs;

- Whether the Executive Director's antidegradation review *was* accurate; and

- Whether *the* Draft Permit includes all appropriate and necessary requirements.[89]

- The depth of the channel, *site-specific* ambient velocity, and the depth of the diffuser.[90]

As a matter of simple grammar, it is clear that the Remand Order references *the* Application, and *the* Draft Permit, as they existed at the time the Order was issued. For example, the ALJs were tasked with taking additional evidence to determine whether the Application was complete and accurate – not to take evidence on what types of changes to the Application could support "some" Draft Permit that did not yet even exist. By using the past tense, the Commission made it clear the ALJs were to receive evidence that the ED's *original* antidegradation review had satisfied the law. But no one offered additional evidence to support the original Application, modeling, antidegradation review, or Draft Permit, or to answer the ALJs' questions and concerns expressed in the original PFD. Instead the Port ignored the Remand Order and changed the discharge location, effectively submitting a new application.

The Port presented voluminous new evidence in support of a *new* Application for a *new* discharge location (thus *new* site-specific conditions), including all *new* modeling. The ED performed a *new* antidegradation review (by a *new* witness) and issued a *new* Draft Permit. The ALJs convened a 2022 merits hearing that was twice as long at the 2020 merits hearing (10 days compared to 5) – to accommodate more than double the number of witnesses that the Port presented (8 compared to 3). This is clearly not what Chairman Niermann had in mind for the Remand, when he stated during an open meeting:

[89] Interim Order, at 1-2, Paragraph I (May 26, 2021) (emphasis added).

[90] Interim Order, at 2, Paragraph II (May 26, 2021) (emphasis added).

> *I do though think that the process is working* in that the protestants have raised legitimate questions about the protectiveness of *the proposed authorization*, and now those questions can be addressed.
>
> * * *
>
> And I appreciate *the burden this matter has already placed on all of the parties*, but in my view, the weight of the equities and the better policy is to remand the matter so that we can determine whether *the proposed authorization* is indeed protective, based on more precise data inputs. And so that's, that's what I would propose.[91]

The Chairman clearly expected, and the Commission ordered, that the Port could submit additional evidence to provide greater clarity regarding the subjects addressed in the Initial Proceeding and PFD. Nothing said at the Commission's open meeting, or in the Remand Order, would have lead anyone to reasonably expect that the Remand would involve 25 new depositions, and a merits hearing twice as long as the original. Talk about a burden.

Perhaps at that open meeting the Port actually did intend to provide supplemental data to support its existing Application, when its counsel said "The ALJs disagreed and they wanted more specific data. That's the type of data that we think we can provide that will show that *being deeper* and having more current enhances the mixing and provides more protection for Marine life and the environment."[92] But the Port certainly thumbed its nose at Chairman Niermann's concept of the process "working" when it moved the outfall to a location where the water is approximately 30 feet *shallower* than in its Original Application. In 2020 the ED told the world that such a revision would send the Port back to square one, when its witness testified under oath:

> I believe that would require a whole new application. I would need to double-check. But because our reviews are site specific, if they move the outfall, that would, basically, be going back to the beginning.[93]

In contradiction of that sworn testimony and statements made at the Commission's open meeting, the "*proposed* authorization" the Chairman spoke of was wholly shredded. Internally, the Port actually did go back to square one, but it got the procedural benefit of skipping the pesky requirements that come with a new application, like new public notice and comments from other

[91] Certified Transcription May 19, 2021 Commission open meeting at 49:19-23, 51:4-10, attached as Exhibit A.

[92] Certified Transcription May 19, 2021 Commission open meeting at 46:15-19 (emphasis added).

[93] Tr. Vol. 5 at 70:7-12 (ED witness Shannon Gibson at the 2020 merits hearing).

regulatory agencies. The ED allowed this improper procedure, and just conducted all new modeling, performed a new antidegradation review, and issued the new Draft Permit.

PAC timely raised the issue with the ALJs and requested that a question be certified to the Commission to clarify the scope of the remand, but the ALJs denied that request – **effectively determining that the Commissioners *do not* determine the scope of any remand, but rather the parties get to**. If this Draft Permit is issued, with or without the changes recommended by the ALJs, it will be clear that the scope of any remand is determined unilaterally by the Applicant. Allowing the Port to ignore the Commission's Remand Order guts the Commission's authority.

The Sunset Commission recently described the TCEQ Commissioners as "reluctant regulators. . . . delegating much of the initial decision making to staff and, to a certain extent, encouraging industry members to self-govern and self-police."[94] The Port, for one, is delighted to self-govern and self-police. This case presented an opportunity for the Commissioners to demonstrate that they actually take ownership of their own orders and are willing to meaningfully enforce them, yet they improperly allowed the Port to go beyond the scope of the remand order. The Commission's issuance of the Revised Draft Permit on the new application is a violation of the Commission's rules, because the scope of the remand did not allow the Port to submit an entirely new application.

An agency is bound to follow its own rules.[95] If an agency wishes to change its rules, it must follow the rulemaking procedures of the APA to modify the rule.[96] It cannot simply disregard the rule in circumstances where the rule plainly applies and guides the Commission's analysis. As the Texas Supreme Court has noted, "If the Commission does not follow the clear, unambiguous language of its own regulation, we reverse its action as arbitrary and capricious."[97]

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[94] Sunset Advisory Commission Staff Report, TCEQ, 2022-23 88th Legislature, at 1.

[95] *Flores v. Employees Ret. Sys. of Tex.*, 74 S.W.3d 532, 542 (Tex. App.—Austin 2002, pet. denied); *Southern Clay Prods., Inc. v. Bullock*, 753 S.W.2d 781, 783 (Tex. App.—Austin 1988, no writ) (citing *Gulf Land Co. v. Atlantic Ref. Co*., 134 Tex. 59, 131 S.W.2d 73, 79 (Tex. 1939)).

[96] *Myers v. State*, 169 S.W.3d 731, 734 (Tex. App.—Austin 2005, no pet.) ("Allowing an agency to create broad amendments to its rules through adjudication, rather than through its rule making authority, effectively undercuts the Administrative Procedures Act.") ("If an agency does not follow the unambiguous language of its own rules, we must consider its actions arbitrary and capricious.").

[97] *Rodriguez v. Service Lloyds Ins. Co.*, 997 S.W.2d 248, 254–255 (Tex. 1999); *see also Bexar Metro. Water Dist. v. Tex. Comm'n on Envtl. Quality*, 185 S.W.3d 546, 551 (Tex. App.—Austin 2006, pet. denied) ("A reviewing court will reverse an agency when it fails to follow the clear, unambiguous language of its own regulations, that is, when its actions are arbitrary and capricious.").

Here, the Commission was required to identify the scope of the remand in its order remanding the case. It did so and that scope limited and defined the proceedings that could occur at the State Office of Administrative Hearings. By allowing the proceedings to far exceed the scope of the remand order, the Commission violated its own rules and committed clear error.

I. Error No. 9: The Commission Included a Monitoring Plan in the Revised Draft Permit that is Not Supported by Any Evidence in the Record.

In their PFD on remand, the ALJs recommended that the "permit require a monitoring plan" for the 2.0 ppt limit on salinity increases.[98] The ALJs also stated, "the Port Authority agrees to work with TCEQ **staff** to develop" such a plan.[99] The evidentiary record, however, contained no testimony or evidence to establish what should be included in any monitoring plan. In fact, both experts for Protestants and the Port testified that they could evaluate such a plan, if one had been proposed. Despite the clear recommendations of GLO and TPWD that there be the limit and monitoring, the Port did not include one in its application and the Executive Director did not include one in either of its Draft Permits. No one, not the parties or TPWD has had any opportunity to evaluate the monitoring plan that the ALJs' recommended be a required part of the permit.

Thus, in the face of the ALJs' recommendation, the Commission could have remanded this matter back to the ALJs to take additional evidence regarding the necessary requirements for any effective monitoring plan. Instead, it appears that the Commission unilaterally developed a monitoring plan outside of the contested case hearing process and included such monitoring plan as key elements of the Revised Draft Permit. This was error, as there is no evidence to support these elements of the Revised Draft Permit. Texas Government Code § 2003.047(m) provides that the Commission's order in a contested case "shall be based solely on the record made before the administrative law judge." Thus, in adopting a monitoring plan apart from any evidentiary basis, the Commission violated this statute.[100]

Moreover, the plan does not take into consideration the complexity of the site or the facts in the record, and will not even do what the ALJs recommend, i.e. monitor to determine if there are any increases in salinity over ambient as much as 2 ppt at 100 meters from the discharge. For

[98] PFD at 12, Finding of Fact 122.

[99] PFD at 38-39.

[100] Because it is not clear at all how the Commission developed the monitoring plan and these additional elements of the Revised Draft Permit, it also raises the question of whether a violation of Tex. Gov't Code § 2001.061 has occurred.

example, the plume will never get to the location proposed for measuring the ebb tide plume. There is a bathymetric feature, a shoulder or side of a cove, that juts out from Harbor Island within 100 meters and blocks the dense plume from moving to the ebb tide monitoring location. The dense saline plume will fall as it moves with the ebb tide and it cannot then climb over the shoulder. Instead, the shoulder will divert the plume toward the middle of the channel.[101]

There is no evidence in the record on how much the plume will be diverted toward the center of the channel during the major periods of ebb tide as the momentum of the plume moves it further toward the middle of the channel while the tide drops. The plume will swing from outgoing to flowing toward the middle of the channel and then swing toward Corpus Christi and back again during one cycle of the tides. There is no evidence in the record on a proper location for monitoring the plume. That work has never been done, but needs to be done for there to be an effective monitoring plan. The experts and all parties have a right to review and comment on any supporting basis for these new elements of the Revised Draft Permit, yet they have been given no opportunity to do so.

A very similar situation will occur with the flood tide. The bathymetric features that create the problems for monitoring the plume are visible in the Port's maps used in the permit on pages 22-25. The locations of the monitoring locations on the maps are not in the evidentiary record.

There are other clear problems with the monitoring plan. The averaging of the monitoring results over time and over channel depth will not identify the maximum increases in salinity to measure with the 2.0 ppt limit or to validate the modeling. The discharges at 100 meters are still narrow plumes of concentrated brines, with salinity levels that create the risk to the sensitive aquatic species.

As noted above, Tex. Gov't Code § 2003.047(m) requires the Commission's order in a contested case to "be based solely on the record made before the administrative law judge." Thus, by going outside the record to include new provisions in the Revised Draft Permit related to a monitoring plan, the Commission violated this statutory provision. This is clear error.[102]

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[101] Ex. PAC 51R-SS6.

[102] To be clear, the Revised Draft Permit needs to have a monitoring plan to address the ALJs' concerns. It would be error for the Commission to issue the permit without the monitoring plan, in light of the ALJs' determinations. But, the proper action was for the Commission to reopen the record to take evidence to determine the monitoring plan, not to unilaterally develop it outside of the evidentiary record in violation of the APA.

III. ERRONEOUS FINDINGS AND CONCLUSIONS

In addition to the errors identified above, the Commission's Order also contains the following erroneous findings and conclusions discussed below.

Finding of Fact No. 45: The additional requirements included in the Revised Draft permit are not supported by evidence in the record. This finding is in error.

Finding of Fact No. 56: The depth of the channel at the outfall location is approximately 65 feet and the use of a 90-foot depth for CORMIX modeling was not reasonable and was error.

Finding of Fact No. 59: The ED's use of 229 feet for DISTB in the CORMIX modeling was materially inaccurate. As noted by Finding of Fact No. 58, the use of 229 feet overpredicted mixing. Therefore, this finding is in error.

Finding of Fact No. 60: The CORMIX user Manual recommends that the Brine module in CORMIX be run for all brine discharges. Therefore, this finding is in error.

Finding of Fact No. 62: The potential for an eddy to form occasionally near the proposed discharge site means that its movement could trap organisms and lengthen exposure times. This finding is in error.

Finding of Fact No. 63: The presence of two outcroppings extending from the shoreline, and the 90-foot depression, introduce some uncertainly into the modeling results, rendering them unreliable. This finding is in error.

Finding of Fact No. 64: The ED's highest predicted effluent percentages should have been used for worst case modeling scenarios. This finding is in error.

Finding of Fact No. 65: CORMIX's 50% margin of error renders the modeling results unreliable. This finding is in error.

Finding of Fact No. 67: The ED's CORMIX modeling inputs are materially inaccurate. This finding is in error.

Finding of Fact No. 68: The ED's CORMIX modeling is not sufficient to ensure the Revised Draft Permit is protective of water quality. This finding is in error.

Finding of Fact No. 69: The Port Authority relied on the SUNTANS modeling it conducted for the Original Application, without revision or updating. Therefore, this finding is in error as it implies the SUNTANS modeling was conducted for the revised application.

Finding of Fact No. 70: The SUNTANS modeling included a calculation for salt mass flux and an input for that calculation included an error that is incorrect by approximately a factor of ten. Therefore, this finding is in error.

Finding of Fact No. 77: Mr. Schaefer used a Texas Water Development Board paper to determine the optimal salinity level of red drum for his review; however he misunderstood or mis-stated the findings in that paper. He also testified that he did not examine salinity toxicity testing by PAC witness Dr. Kristin Nielsen. This finding is in error.

Finding of Fact No. 78: The ED's antidegradation review does not demonstrate that the proposed discharge will maintain existing uses and not lower water quality by more than a de minimis amount. This finding is in error.

Finding of Fact No. 83: Organisms entering the Aransas Pass inlet have three alternate pathways to travel to the estuaries: Corpus Christi Ship Channel, Lydia Ann Channel, and Aransas Channel. Approximately 20% to 70% of larvae are estimated to use the Corpus Christi Ship Channel for this journey. Therefore, as stated, this finding is in error.

Finding of Fact No. 96: Exposure times will be longest during slack tide conditions, but the actual exposure times are impossible to determine. The evidence in the record does not support this finding as stated. Therefore, this finding is in error.

Finding of Fact No. 97: The evidence in the record is insufficient to establish this finding. Therefore, this finding is in error.

Finding of Fact No. 103: The careful consideration required for evaluating the impacts of a discharge of salinity was not performed. This finding is in error.

Finding of Fact No. 104: With the addition of a salinity limit in the Revised Draft Permit, the adverse impact on the marine environment, aquatic life, and wildlife, including spawning eggs and larval migration will be reduced, but not eliminated. Therefore, this finding is in error.

Finding of Fact No. 106: Because the proposed discharge will adversely impact aquatic life, there will be cascading effects on aquatic-dependent species, including birds. This finding is in error.

Finding of Fact Nos. 107: The proposed discharge will adversely impact birds and endangered or threatened species. Therefore, this finding is in error.

Finding of Fact Nos. 111: Because the proposed discharge will adversely impact aquatic life, there will be cascading effects on recreational and commercial fishing, or fisheries. This finding is in error.

Finding of Fact Nos. 112: The proposed discharge will adversely impact recreational activities, commercial fishing, and fisheries in Corpus Christi Bay and the ship channel. This finding is in error.

Finding of Fact No. 116: The Revised Application did not have a sponsoring witness at the Remand Hearing. The absence of a sponsoring witness renders the Revised Application unreliable and lacking in evidentiary value. This finding is in error.

Finding of Fact No. 117: The Revised Application and supporting documentation did not correctly identify the locations of the proposed outfall or depth of the channel at the outfall location. Therefore, this finding is in error.

Finding of Fact No. 118: The evidence is insufficient to establish this finding. Therefore, this finding is in error.

Finding of Fact No. 120: Whether the Facility is properly characterized as a minor or major facility does affect whether the ED's antidegradation review was accurate and whether the Revised Draft Permit includes all appropriate and necessary requirements. This finding is in error.

Finding of Fact No. 121: The Application failed to provide information about the effluent as required by 30 TAC § 305.45(a)(8)(B)(ii) which requires that the application include information on the chemicals or characteristics of the chemicals that can be expected to be in the discharge "described in enough detail to allow evaluation of the water and environmental quality considerations involved; …" Therefore, this finding is in error.

Finding of Fact No. 123: The Revised Draft Permit should include all of the information identified in this finding. Therefore, this finding is in error.

Finding of Fact No. 124: Because WET testing will not adequately address the harm from salinity to the most sensitive aquatic life species, changes need to be made to the WET testing requirements. This finding is in error.

Finding of Fact No. 125: Because the Applicant submitted a New Application, new notice was required but was not provided. This finding is in error.

Finding of Fact No. 135: The Port should bear all costs of transcribing this proceeding, including all costs from the original hearing, and should not be entitled to reimbursement from any other parties. This finding is in error.

Conclusion of Law No. 3: New notice was required by TCEQ rules because the Port's revised application represented a major amendment to the initial application. Therefore this conclusion is in error.

Conclusion of Law No. 4: Notice of the Original Application and the Initial Proceeding were properly provided to the public and to all parties. Tex. Water Code §§ 5.115, 26.022, 26.028; Tex. Gov't Code §§ 2001.051-052; 20 Tex. Admin. Code ch. 39. Notice of the New Application and hearing thereon were not properly provided. Therefore, this conclusion is in error.

Conclusion of Law No. 10: Not all parts of the application that were admitted into the record were properly sponsored or authenticated so as to allow them to be admitted into the evidentiary record for all purposes over the objections of Protestants. Therefore this is conclusion is in error.

Conclusion of Law No. 11: There must be no lethality to aquatic organisms that move through a ZID. 30 Tex. Admin. Code §§ 307.6(c)(6), 307.8(b)(2). This conclusion applies the wrong standard and, therefore, is in error.

Conclusion of Law No. 17: The ED's antidegradation review does not ensure compliance with the Tier 1 and Tier 2 antidegradation standards. 30 Tex. Admin. Code § 307.5(b). This conclusion is in error.

Conclusion of Law No. 18: The ED's modeling analysis of the proposed discharge is not sufficient to ensure the Revised Draft Permit is protective of water quality. This conclusion is in error.

Conclusion of Law No. 21: With the additional permit requirements described in Finding of Fact No. 122, the Revised Draft Permit is more protective but still does not include all appropriate and necessary requirements to protect the marine environment, aquatic life, wildlife, recreational activities, commercial fishing, and fisheries. Therefore, this conclusion is in error.

Conclusion of Law No. 22: With the additional permit requirements described in Finding of Fact No. 122, the Revised Draft Permit is more protective of water quality and the uses of the receiving waters but still does not satisfy the applicable TSWQS. 30 Tex. Admin. Code ch. 307. Therefore, this conclusion is in error.

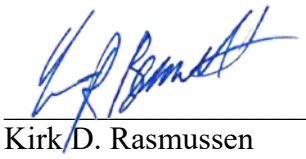
Conclusion of Law No. 25: The Port Authority substantially complied with all applicable notice requirements for the Original Application but not for the new Application submitted on remand. 30 Tex. Admin. Code ch. 39. Therefore, this conclusion is in error.

Conclusion of Law No. 28: The Port should bear all costs of transcribing this proceeding, including all costs from the original hearing, and should not be entitled to reimbursement from any other parties. Therefore, this conclusion is in error.

IV. CONCLUSION

WHEREFORE, PREMISES CONSIDERED, Protestants respectfully request that the Commission reverse its order and deny the Port's permit application, because such fails to demonstrate that the proposed facility will be protective of public health and the environment.

Respectfully submitted,



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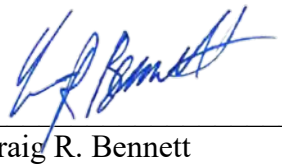
CERTIFICATE OF SERVICE

I certify that a copy of this document was served on all required persons and parties listed in the Chief Clerk's mailing list on this date, January 13, 2023, in accordance with the applicable service procedures.



Craig R. Bennett

TCEQ DOCKET NO. 2019-1156-IWD

IN THE MATTER OF THE	**§**	**TEXAS COMMISSION**
APPLICATION OF PORT OF	**§**	
CORPUS CHRISTI AUTHORITY OF	**§**	**ON**
NUECES COUNTY FOR TPDES	**§**	
PERMIT NO. WQ0005253000	**§**	**ENVIRONMENTAL QUALITY**

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Attachment 4 -

EPA Letter Notifying the TCEQ that TPDES Permit No. TX0138347 (WQ0005253000) Is Invalid, Including the Attachment to the Letter: EPA's December 15, 2021 Interim Objection to TCEQ's Issuance of the Permit

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

Office of the Regional Administrator

January 19, 2023

Jon Niermann, Chairman
Office of Commissioners
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: TPDES Permit No. TX0138347 (WQ0005253000)
Port of Corpus Christi Authority of Nueces County

Dear Chairman Niermann:

The U.S. Environmental Protection Agency, Region 6 is in receipt of TPDES Permit No. TX0138347 (WQ0005253000), issued by the Texas Commission on Environmental Quality to the Port of Corpus Christi Authority of Nueces County on December 20, 2022. The Environmental Protection Agency sent the attached Interim Objection to the Texas Commission on Environmental Quality's issuance of this permit on December 15, 2021, and our objection remains unresolved.

The Texas Commission on Environmental Quality's issuance of TPDES Permit No. TX0138347 without responding to the Environmental Protection Agency's Interim Objection is a violation of Clean Water Act § 402, the Environmental Protection Agency's regulations at 40 C.F.R. § 123.44 and 40 C.F.R. § 122.4(c), and the Memorandum of Agreement between the Environmental Protection Agency and the Texas Commission on Environmental Quality. Until such time as the Texas Commission on Environmental Quality responds to the Interim Objection to address the Environmental Protection Agency's concerns, the Environmental Protection Agency continues to view this permit as a draft permit and not an effective National Pollutant Discharge Elimination System permit for CWA purposes. Thus, it does not provide CWA authorization for the discharge of pollutants to waters of the United States from the Port of Corpus Christi Authority of Nueces County facility. Under CWA § 301, it is unlawful for any person to discharge any pollutant to waters of the United States without authorization under specific provisions of the CWA, including the section 402 National Pollutant Discharge Elimination System permitting program.

We appreciate your time and attention to this important matter, and we continue to be open to dialogue on the topics addressed in this letter and in previous correspondence. A copy of this letter has also been forwarded to the POCC. If you have any questions, please feel free to contact Charles Maguire at (214) 665-8138 or maguire.charles@epa.gov.

Sincerely,

EARTHEA NANCE

Digitally signed by EARTHEA NANCE
Date: 2023.01.19 16:14:43 -06'00'

Earthea Nance, PhD, PE
Regional Administrator

Attachment

cc: Erin Chancellor, Interim Executive Director
TCEQ

Mary Smith, General Counsel
TCEQ

Charmaine Backens, Acting Director, Office of Legal Services
TCEQ

Vic McWherter, Public Interest Counsel
TCEQ

Sean Strawbridge, Chief Executive Officer
Port of Corpus Christi Authority

Eric Allmon
Perales, Allmon & Ice, P.C., representing
Port Aransas Conservancy

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

December 15, 2021

Mr. Earl Lott, Director
Office of Water (MC-158)
Texas Commission on Environmental Quality (TCEQ)
P.O. Box 13087
Austin, TX 78711-3087

Re: Interim Objection – Request for Additional Information
TPDES Permit No. TX0138347 (WQ0005253000)
Port of Corpus Christi (POCC) Authority of Nueces County

Dear Mr. Lott:

Thank you for the submittal of the proposed TPDES permit and supporting documents for the Port of Corpus Christi (POCC) Authority in response to our letter dated September 20, 2021 (Notice of Termination of permit review waiver). We received access via FTP site on October 1, 2021. In addition, we were granted an extension for review that revised the deadline from November 15, 2021 to December 15, 2021. We are also in receipt of your letter dated November 12, 2021, which questions the EPA's authority to terminate permit review waiver for the proposed TPDES permit for POCC. You state in your letter that the EPA had ample time to engage with TCEQ on this permit and did not provide comments during the public comment period. Yet, as you also noted, the POCC proposed permit was not forwarded to the EPA at the draft permit stage for review because this facility was classified by TCEQ as a Minor facility, for which the EPA waived review under the Memorandum of Agreement (MOA) between the EPA and TCEQ. However, as explained in detail in Attachment A, Item A, the EPA has determined that the POCC facility was incorrectly classified as a Minor facility under federal regulations and the Major/Minor worksheet used by the State to classify the facility. Because the facility proposes to discharge process wastewater as defined at 40 C.F.R. 122.2, the EPA has determined that the facility should be classified as a Major facility.[1] The EPA has not waived review of Major facilities. Consequently, this proposed permit should have been forwarded to EPA for review at the draft permit stage as a Major permit in accordance with federal regulations and the MOA.

After being notified of concerns regarding the permit, and of the substantial public interest in this matter, EPA requested an opportunity to review the permit in accordance with our oversight role and responsibility in partnering with our state counterparts to ensure the efficiency of the administration of the NPDES permitting program, and that state-issued permits are consistent with the requirements of the Clean Water Act (CWA) and protective of water quality and aquatic life.

EPA appreciates the time and effort that has gone into the permitting process regarding the POCC permit by both TCEQ and third parties. Nonetheless, as TCEQ noted in its November 12, 2021, letter to EPA, following a hearing before the Commission on May 14, 2021, the Commission remanded POCC's permit application to the State Office of Administrative Law Judges (SOAH) to take additional evidence. Following the remand, POCC submitted a revised application on June 25,

[1] See *40 CFR 122.2 provides "**Major facility** means any NPDES "facility or activity" classified as such by the Regional Administrator, or, in the case of "approved State," the Regional Administrator in conjunction with the State Director."

2021, and additional information on July 28, 2021. Subsequently, based on the revised application, TCEQ prepared a new Statement of Basis and revised permit. It is EPA's understanding that proceedings regarding the revised permit are ongoing before the SOAH and that a contested case hearing before an Administrative Law Judge (ALJ) will not take place before March of 2022. Consequently, EPA does not believe allowing EPA to review the permit following receipt of the requested information and provide comments in any way disrupts or slows down the process.

Our permit review process has benefitted from the open communication and coordination regarding responses and clarification from your staff to our concerns and comments. As a result of our review of the proposed permit, statement of basis, and other supporting documents, we believe additional information is needed to determine whether the proposed permit meets the guidelines and requirements of the Clean Water Act. The EPA offers comments/recommendations as outlined in Attachment A, and requests submittal of additional information and responses as appropriate. This Interim Objection is being issued pursuant to 40 CFR 123.44(d)(2). Consistent with that provision, the full period of time for EPA's review of the proposed permit will recommence when the Regional Administrator has received the information requested in this Interim Objection. Under Section IV.C.3 of the MOA, EPA will have 30 days to make a general objection to the proposed permit. If EPA makes a general objection, it reserves the right to take 90 days to supply any specific objections, as specified in 40 CFR 123.44(a)(1). However, EPA will make every effort to convey any objections in an expedited manner given the status of the permit.

In addition, EPA requests that its comments on the proposed permit be included in the record before the ALJ in this proceeding and that the ALJ's revised Proposal for Decision be forwarded to EPA for review 30 days prior to the record being closed, in accordance with Section IV.F. of the MOA.[2] EPA also requests that the resulting proposed permit from the contested case hearing proceedings be forwarded to EPA for review in accordance with Section IV.C.3 of the MOA based on the fact that there has been significant public comment with regard to the proposed permit.

We appreciate your attention and cooperation during this permit review process, and look forward to your responses and input. Feel free to contact me at (214) 665-8138, if you have any questions or have your staff contact Mark Hayes at (214) 665-2705, or EMAIL:hayes.mark@epa.gov.

Sincerely yours,

Charles Maguire

Charles W. Maguire
Director
Water Division (WD)

Enclosures

[2] Section IV.F of the MOA provides that "EPA shall have thirty (30) days to comment on a revised PFD or permit before the record is closed on a proposed permit which contains provisions which differ from the draft or proposed permit reviewed by EPA, as specified in Section IV.C.3. of this MOA, relating to re-reviews. EPA may object in accordance with the grounds and procedures set out in Section IV.C.3 of this MOA. TCEQ staff will transmit to the Commissioners and place into the record of the contested case hearing, if any, all EPA comments and objections on a proposed permit prior to their decision."

cc (electronic): Robert Sadlier, Deputy Director
Water Quality Division (MC-145)
TCEQ

Matthew Udenenwu, Section Manager
Wastewater Permitting Section (MC-148)
TCEQ

Ms. Shannon Gibson
Industrial Permits Team
Wastewater Permitting Section (MC-148)
TCEQ

Mr. Sean C. Strawbridge
Chief of Executive Officer
Port Corpus Christi
400 Harbor Drive
Corpus Christi, TX 78401

ATTACHMENT A

COMMENTS/RECOMMENDATIONS

A. Definition of Process wastewater and Incorrect Rating of the facility as a Minor based on the TPDES Permit Major/Minor Rating Worksheet:

TCEQ classified this facility as a Minor facility based on TPDES Permit Major/Minor Rating Worksheets dated August 2018 and revised July 2019, in large part because "the discharge is recorded on the Worksheets as non-process wastewater. EPA has determined that this is incorrect. POCC is proposing to discharge the waste product resulting from the production of potable/drinking water, i.e., wastewater generated by a reverse osmosis process that contains high concentrations of salt and other impurities relative to the seawater feedstock, and supernatant from solids/sludge thickening and rewatering. EPA has determined that this meets the definition of process wastewater at 40 C.F.R 401.11(q). That section defines process waste water as "any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product."

Pursuant to 40 CFR 122.2, the decision to classify a facility as a Major is to be made by "the Regional Administrator, or, in the case of "approved State programs," the Regional Administrator in conjunction with the State Director." If POCC's discharge is properly classified as process wastewater on TPDES Permit Major/Minor Rating Worksheet, the rating of the facility changes from Minor to Major.[3] EPA therefore requests the classification of the facility be changed from Minor to Major.

In addition, EPA requests that going forward desalination facilities in general be classified as Major facilities due to the facilities' discharge of process wastewater.

B. CWA Section 316(b) Rule and requirements:

A clarification request was submitted by EPA (email dated October 27, 2021) regarding the facility's operation in accordance with the requirements of the CWA Section 316(b) rule for new facilities. EPA's understanding from conversations with TCEQ staff is that the POCC does not use and/or proposes to use water for cooling purposes (this was also documented in the permit application submitted March 2018 and 2021). Thus, it appears the POCC facility is not subject to 316(b) requirements. It was also noted that POCC plans to locate the intake structure in the Gulf of Mexico (GOM) that will be covered under a water rights permit. We would suggest establishing an additional provision in OTHER REQUIREMENTS section

[3] EPA has provided guidance on rating non-municipal facilities as either major or minor. (https://www3.epa.gov/npdes/pubs/owm0116.pdf). A discharge that contains only process wastewater is classified as a Type II discharge (see page 3 of the NPDES Permit Rating Work Sheet). The Type classification (Type I, II and III) for a discharge influences the score in the NPDES Permit Rating Work Sheet.

of the permit that reiterates the requirement cited in Permit Conditions nos. 1 and 4, that requires the permittee to notify the TCEQ of any modifications and/or alterations within the facility. For this proposed permit, we suggest the requirement for the POCC to notify the TCEQ of any modifications to the use of water withdrawals from the intake structure.

C. CORMIX Model Results:

Below are our comments (dated December 6, 2021) submitted to you via email (on December 6, 2021) as a result of our review of the CORMIX modeling documented in the TCEQ's Interoffice Memo dated August 2021 and the analysis entitled, "Mixing Analysis for the Port of Corpus Christi Authority of Nueces County." We note that the CORMIX model was used to characterize the effluent discharge via a diffuser for the calculations of water quality limits and the reasonable potential (RP) analysis. We are resubmitting them to you to include these comments along with your responses (dated December 8, 2021) in this Interim Objection Letter for required follow-up as needed and for completeness of record.

EPA December 6, 2021 Comment 1:

The memo states that "if the effluent flowrate decreases by more than 10%, the diffuser ports can be blocked, or smaller diameter ports can be used to maintain the same port exit velocity" and that when the port velocity is maintained, the diffuser can achieve the same effluent dilutions at lower effluent flow rates. This would be true if two conditions exist: 1) The ports are (and will remain) close enough together that the jets from each port merge within a short distance after discharge, and 2) the overall length of the diffuser is unchanged. It would be easier to maintain those conditions if the ports are shrunk, rather than blocked. So, if it's likely that the flow rate will decrease from the current proposal, is it possible to clarify their plans for modifying the diffuser to account for that? That said, the scenarios for 50% recovery did use a lower flow rate (83.1 mgd instead of 95.6 mgd) and that didn't reduce the dilution achieved. If the plan is to block ports on the end(s) of the diffuser (so that the port size and spacing can remain the same), then it would be a recommended that some additional scenarios be run reflecting the shortened diffuser length, just to verify that dilution isn't reduced.

TCEQ December 8, 2021 Response 1:

For new discharge applications where a diffuser is proposed, the TCEQ guidance document Mixing Analyses Using CORMIX specifies that the proposed permitted flowrate should be evaluated. The proposed permit authorizes one flow phase (95.6 MGD), which is the proposed flowrate associated with the facility operating at a 40% recovery rate. Additional cases were modeled using an effluent flowrate of 83.1 MGD because this is the proposed effluent flowrate when the facility operates at a 50% recovery rate. The same diffuser design was evaluated for both effluent flowrates, and no other diffuser design was submitted with the application.

Once the facility begins discharging, the permittee will be required to maintain the diffuser such that a maximum effluent percentage of 14.6% be achieved regardless of the actual effluent flowrate. This requirement is defined in the proposed permit under Other Requirement No. 4. Failure to operate the diffuser such that 14.6% effluent or less is achieved at the edge of the ZID would be a violation of this permit requirement.

Additionally, Permit Conditions Nos. 1 and 4 require the permittee to notify the Executive Director of relevant information related to a permit application or if any planned physical alterations or additions will be made to the permitted facility. Therefore, if the diffuser design is amended, the permittee is required to submit the relevant information to the Executive Director. At that time, the Executive Director will review the information and determine if a permit amendment is needed.

EPA December 6, 2021 Comment 2:

Also, the August 10, 2021 memo states on Page 8 that, because the receiving water is tidal, and because the mixing zones are centered on the diffuser barrel, the analyst evaluated the location at which the plume centerline intersects the regulatory mixing zones at one-half the downstream distance in the x-direction. This appears to be fine, however, it may not be "conservative," as stated in modeling documentation. This assumption adequately accounts for the fact that the ambient velocity is tidal and that the mixing zone is centered on the diffuser, so the plume would only need to travel half the total size of the mixing zone before it reaches the boundary. However, it doesn't take into account any re-entrainment or buildup that may occur due to the reversing flows. The CORMIX model does have some capability to model "unsteady" ambient environments, as described in Section 4.4.3 of the user manual.

TCEQ December 8, 2021 Response 2:

The location at which the plume intersects the mixing zone boundaries was described as "conservative" in the 8/10/2021 memo compared to the location the applicant used to assess where the plume intersects the mixing zone boundaries. Specifically, the applicant used the full downstream distance in the x-direction whereas I used one-half the downstream distance. Because the plume becomes more diluted the farther it travels from the diffuser ports, by assessing the model predictions at one-half the downstream distance, the centerline of the plume is more concentrated at this location than at the full downstream distance. Thus, the locations at which the model predictions were assessed are conservative compared to how they were assessed by the applicant.

The basic CORMIX methodology relies on an assumption of steady-state ambient conditions because the time scale for mixing processes is typically on the order of minutes up to approximately one hour. The TCEQ guidance document for reviewing diffusers does not address unsteady ambient flow conditions (i.e., tidal reversing) since tidal reversing is a phenomenon that typically occurs twice per day following each slack tide and represents conditions that only occur for a few minutes each day. Therefore, predictions of effluent concentrations are more representative under steady state ambient conditions rather than at unsteady ambient conditions which occur infrequently and for a short duration. Additionally, using the unsteady tidal velocity option for this permit application would be inconsistent with how the TCEQ reviews other diffuser discharges into tidal water bodies.

D. Permit Conditions for Total Dissolved Solids (TDS), Sulfates, and Chlorides:

The proposed permit establishes reporting and monitoring requirements for parameters TDS, sulfates, and chlorides. It is cited in the statement of basis that there's no national effluent

limitation guidelines for this type of operation and therefore, reporting and monitoring requirements were based on best professional judgement (BPJ). It was also stated that there are no numeric water quality criteria for TDS, sulfates, and chlorides for this waterbody segment, and that " the applicant performed extensive analyses and modeling to conclude . . . the discharge would not impact salinity gradients in the surrounding waters and that survival, growth, and reproduction of aquatic life would not be significantly impacted . . ." We request additional information and rationale on how based on BPJ, reporting and monitoring requirements were established (i.e., requirements and conditions of similar permitted operations and waste streams).

E. Tier 2 Antidegradation Review:

The statement of basis documents that "A Tier 2 review has preliminary determined that no significant degradation of water quality is expected in Corpus Christi Bay . . ." In response to the TCEQ Executive Director's request for clarification and the Interim Order of May 26, 2021, POCC submitted additional updated information (relocation of the outfall and design of the diffuser) for a revised Tier 2 Antidegradation review. However, the TCEQ should include in the statement of basis, the acknowledgement of this additional information provided by the POCC and confirm and/or address how this complies with the TCEQ's Tier 2 antidegradation review policy.

F. Whole Effluent Toxicity

Whole Effluent Toxicity (WET) requirements were revised from the first version of the proposed permit. The most current version of the permit includes chronic testing requirements, using approved marine chronic methods with the most sensitive vertebrate and invertebrate marine species available. The critical dilution calculated is a result of the CORMIX model (see comments above). EPA would like to note that WET testing is a part of EPA's integrated strategy in the assessment of water quality, which includes the use of three control approaches (the other two being chemical-specific limits and biological criteria). As such, EPA reminds TCEQ that WET is not intended to take the place of any other biological assessment that is appropriate for water quality assessment of this receiving stream.

Attachment 5 -

EPA Notice to the TCEQ
Rescinding Prior Waiver of Review Regarding TPDES No. TX018347 (WQ0005253000) and Terminating Waiver of Review for All Future Permit Actions Regarding Draft Permits for Desalination Facilities

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

September 20, 2021

Mr. Earl Lott, Director
Office of Water (MC-158)
Texas Commission on Environmental Quality (TCEQ)
P.O. Box 13087
Austin, TX 78711-3087

Re: Notice of Termination – Permit Review Waiver
Permits for Desalination Facilities, including
Port of Corpus Christi Authority of Nueces County
TPDES Permit No. TX0138347 (WQ0005253000)

Dear Mr. Lott:

This letter regards EPA review of draft permits for desalination facilities, including the draft permit and application (TPDES No. TX0138347, WQ0005253000) for the Port of Corpus Christi Authority of Nueces County ("Port Authority") initially submitted to your office on March 2018. EPA hereby terminates its waiver of review of these draft permits in accordance with Section IV.C.8 of the 2020 Memorandum of Agreement (MOA) between the TCEQ and the EPA concerning the National Pollutant Discharge Elimination System. With regard to TPDES Permit No. TX0138347, the Port Authority proposes to operate a desalination plant to provide an additional water source (potable water) to the surrounding community during drought conditions. Because this facility is classified as a minor by TCEQ, it was not forwarded to EPA for review pursuant to EPA's waiver of review of permits for minor facilities under the MOA. However, the EPA Region 6, is aware of the concerns over TCEQ's permitting process with regard to this permit as well as the impacts of the proposed discharge to aquatic life, the water quality of the receiving waterbody Corpus Christi Bay, and the TCEQ's overall permit development and issuance process. We are aware that a State Office of Administrative Hearing (SOAH) contested case hearing was held July 9, 2020, on the draft permit and application, after which the Administrative Law Judges (ALJs) provided a recommendation for the TCEQ to deny the permit. The TCEQ Commissioners signed an Interim Order, May 26, 2021, filed by the SOAH June 1, 2021, remanding the proposed permit and application back to the SOAH for additional evidence. We also understand the applicant provided additional information, which resulted in a revised application/draft permit/statement of basis, and that a preliminary hearing is to be scheduled in the near future.

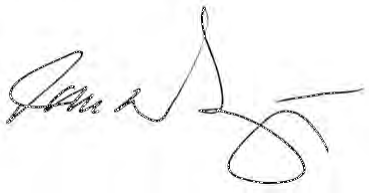
As part of our oversight role and responsibility, the EPA continues to be committed in partnering with our state counterparts to ensure the efficiency of the administration of the NPDES permitting program. More specifically, the EPA is to ensure that state issued permits are consistent with the requirements of the Clean Water Act (CWA) and protective of water quality and aquatic life. Therefore, in accordance with Section IV.C.8 of the MOA, which states that "EPA does not relinquish the right to petition the

TCEQ for review of a permit action or inaction because of a possible violation of federal or state statutes, rules, and policies. The EPA may terminate a waiver as to future permit actions, in whole or in part, at any time, by sending the TCEQ a written notice of termination," the EPA rescinds its waiver of review of draft permits for desalination facilities, including draft TPDES permit No. TX0138347 (WQ0005253000) and requests the submittal of these draft permits to EPA for review in accordance with Section IV.C.8 of the MOA.

Because the State permitting process with regard to TPDES permit No. TX0138347 has been ongoing for some time, the EPA is requesting not only review of any revised draft permit with regard to this facility, but also documents in TCEQ's files related to the Port Authority's original March 2018 application and the proposed permit submitted to the Commissioners on May 19, 2021, including TCEQ's response to public comments and the ALJs Proposal for Decision following the contested case hearing. See Section IV of the MOA related to EPA's review of TCEQ's permits on appeal and Section III.A.10 of the MOA, which provides that TCEQ files related to TPDES permits will be readily available to EPA. Pursuant to Section VIII.A.6. of the MOA, EPA requests TCEQ forward the above requested information within 10 days of receipt of this letter.

We look forward to working with you and your staff, during this permit issuance process. Feel free to contact me at (214) 665-8138, if you have any questions or have your staff contact Mark Hayes at (214) 665-2705, or EMAIL:hayes.mark@epa.gov.

Sincerely,



Charles W. Maguire
Director
Water Division (WD)

cc (electronic): Robert Sadlier, Deputy Director
Water Quality Division (MC-145)
TCEQ

Matthew Udenenwu, Section Manager
Wastewater Permitting Section (MC-148)
TCEQ

Ms. Shannon Gibson
Industrial Permits Team
Wastewater Permitting Section (MC-148)
TCEQ

Attachment 6 -

Certified Transcription of the May 19, 2021 TCEQ Open Meeting

CERTIFIED COPY

VIDEO TRANSCRIPTION OF

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MAY 19, 2021

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A P P E A R A N C E S

MARY SMITH
GENERAL COUNSEL

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CHAIR

ERNEST WOTRING
BAKER WOTRING LLP

EMILY LINDLEY
COMMISSIONER

BOBBY JANECKA
COMMISSIONER

CRAIG BENNETT
LAW FIRM OF JACKSON WALKER

UNIDENTIFIED FEMALE SPEAKER

REPRESENTATIVE COOK

KATHY HUMPHREYS
ENVIRONMENTAL LAW DIVISION

PETER SCHAEFER
WATER QUALITY DIVISION

UNIDENTIFIED MALE SPEAKER

VIDEO TRANSCRIPTION OF

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MAY 19, 2021

MS. SMITH: Item Number Two is the consideration of the ALJ's proposal for a decision, and proposed order concerning the application of the Port of Corpus Christi Authority of Nueces County, for TPDES Permit Number WQ0005253000, to discharge treated effluent from a proposed marine desalination plant. The order of presentation should begin with the applicant, followed by protestants, the ED, and then OPIC.

By letter dated April 30th, 2021, the Chief Clerk's Office, at the request of the Office of General Counsel notified the parties that they will each have the following oral argument time. Applicant will have 12 minutes. Protestants will have 12 minutes, collectively. The ED will have eight minutes, and OPIC will have eight minutes. The applicant may save time for rebuttal, as it bears the burden of proof on this application.

CHAIR NIERMANN: Thank you, Ms. Smith. And I'll ask the representatives for the applicant to go ahead and identify themselves for the record. And then, the floor is yours.

ERNEST WOTRING: Yes, good morning. My name is Ernest Wotring, of the Law Firm of Baker Wotring. And I will be presenting argument on behalf of the Port Authority of Corpus Christi on Item Number Two on today's agenda, for the Commissioners.

Port Authority represents the interests of the over 400,000 residents of Nueces and San Patricio Counties, the City of Corpus Christi, and other local governments in the surrounding region. Port Authority is required to develop port related industries that advance the economies of Nueces and San Patricio Counties, and its efforts have attracted billions of dollars of private capital to the region, built a tax base of all local taxing authorities, and created employment opportunities for thousands of South Texans over several generations.

To further promote a healthy local environment while ensuring protection of the environment, Port Authority is seeking a TPDES permit for a proposed seawater desalinization facility. The proposed desalinization facility will bring potable water to the Nueces and San Patricio Counties that have suffered repeated, severe drought conditions, posing imminent threats of disaster to the public's health, property, and the economy in the region.

The Port Authority supports the Executive Director's motion to remand this matter so that it can provide additional evidence in support of the draft permit. The Texas Legislature has expressed the importance of desalination for the future of the state. As the Texas Legislature has stated, 'With this state facing an ongoing drought, continuing population growth, and the need to remain economically competitive, every effort must be made to secure and develop clinical and cost effective water supply to meet the ever increasing demands for water.'

The pressing need for new sources of potable water, and the evidence in the record regarding the draft permit make a compelling case to grant the Executive Director's motion to remand.

The record shows that the discharged from the proposed desalinization facility will not significantly increase the salinity in the Corpus Christi Ship Channel. At most, any increase of salinity will be less than 1%. In addition, the volume of the discharge will only be, at most, .5% of the daily tidal exchange flow in the Channel. The natural salinity in the Corpus Christi Ship Channel varies significantly throughout the year, from 39 parts per thousand at the highest, to 18 parts per

thousand at the lowest. So the discharge will have a smaller impact than the natural occurring increase and decrease in salinity, which is far more variable and extreme than the proposed discharge into the Corpus Christi Ship Channel from the facility.

ALJs identified issues with the modeling from the facility's discharge as being inaccurate. 1) The depth of the channel of the discharge into the ambulant velocity of the water where the outfall is located. The Executive Director has requested that the Commissioners order the ALJs to reopen the evidence so additional modeling can be performed with updated inputs to address the concerns expressed by the ALJs. Port Authority supports the Executive Director's request of the remand, to respond to the issues in the modeling that were raised in the contested case process, and to provide additional evidence that the depth of the Channel, and other issues demonstrate that the proposed permit is protective of the environment, and marine life. Port Authority supports this request to remand, as it has supported other additional measures in connection with the draft permit, to respond to the TCEQ's inquiries, and to answer legitimate concerns about the proposed facility.

And the Texas Park - Department of Parks and Wildlife raised concerns about the possible impacts of the discharge, and requested whole effluent toxicity testing, also known as WET testing. Port Authority voluntarily agreed to add to the, the WET testing, the firmest requirements, to confirm that the discharge would not be harmful to marine life. Port Authority has agreed to chemical analysis of the outfall within 60 days of the initial discharge, for 71 toxic pollutants listed in the Texas Surface Water Quality Standards.

On remand, the Port Authority will provide additional modeling information, and work with the staff of the TCEQ to supply additional data that it believes will confirm the testimony of the Port Authority's expert witnesses, and TCEQ's witnesses, that the outfall from the facility meets the Texas Surface Water Quality Standards, and is protective of aquatic life in the marine environment.

Under 30 TAC Section 80.265, on the motion of any party, or on a motion - on, on its own motion, the Commission may reopen the record for further proceedings on the specific issues in dispute.

Case at hand is exactly the type of situation that that section was intended to address. Reopening

the evidence on the modeling issue is appropriate because it will allow the concerns of the ALJs to be addressed, and the permit application reevaluated, with a relatively small amount of additional work when compared to the time and effort that has already been expended. The remand will avoid the waste of the significant public resources that have already been invested in seeking to obtain this TPDES permit, and the remand will avoid a significant delay in obtaining potable water.

In prior briefings, arguments were raised that the remand should be not granted because it would be unfair, or inequitable to do so. In fact, the equities favor the Port Authority's efforts to obtain fresh, clean drinking water for the residents, community, and the region where it serves. The Port Authority is attempting to follow the instructions from the Texas Legislature that every effort must be made to secure and develop plentiful, and cost effective water supply to meet the ever increasing demands for water, and that in this state, marine seawater is a potential new source of water for drinking, and other beneficial uses.

The Texas Legislature said that equities could apply to this contested case hearing, and the motion

to remain, and those equities fall squarely in favor of granting the Executive Director's motion to remand, to permit the Port Authority to continue its efforts to ensure that necessary water supplies are made available to the people, and industry the Port serves. Equities do not support denying the motion so that efforts to obtain plentiful and cost effective water supply are delayed, perhaps for years.

Protestants have argued that the expense of this matter is a burden on taxpayers and the TCEQ. Protestants' concerns about the taxpayers' expense ring hollow. Those who oppose the remand have made it clear in public statements that they will oppose any and all of the Port Authority's projects, and development in the Corpus Christi Ship Channel.

TCEQ Executive Director and the Port Authority make this request for remand because doing so is the most efficient path forward for the public good, as defined by the Texas Legislature. The Port Authority of Corpus Christi respectfully request the Commissioners grant the Executive Director's motion to remand this matter, to take additional evidence regarding the depth, modeling, and other referred issues that rely on the model.

CHAIR NIERMANN: Thank you --

MR. WOTRING: Thank you.

CHAIR NIERMANN: -- Mr. Wotring. And do I understand that you're going to reserve the remainder of your time for rebuttal?

MR. WOTRING: That's correct.

CHAIR NIERMANN: Thank you. Colleagues, I, I'm directing a little, a little traffic here. We have Representative Tinderholt available to address the Commission on Old Business One, and since he has a difficult schedule, I want to try to accommodate him. So let's pause here, and we'll have Counsel, our General Counsel call the caption for Old Business One; we'll hear from the Representative, then we'll return to this Item Two, and take that opportunity to pose any questions that we may have for Mr. Wotring at, at this point. Ms. Smith, would you call Old Business One, and we'll give the Representative an opportunity to, to speak?

(SKIP TO 23:26 - PROPOSAL FOR DECISION, ITEM 2)

CHAIR NIERMANN: Let's return to Item Two. Mr. Wotring, I'm sorry to - I'm glad you were able to finish your, your presentation. Let me check in to see if either of my colleagues have any questions for you at this point. I do not. Commissioner Lindley, any questions for Mr. Wotring?

COMMISSIONER LINDLEY: I do not. Thank you.

CHAIR NIERMANN: Mr. Janecka?

COMMISSIONER JANECKA: Likewise - I don't at this time. Thanks.

CHAIR NIERMANN: Okay. All right. Let's pause there. Representative Cook, are you on the line? All right. On Item Two, let's, let's take the protestants' presentation at this point. Mr. Bennett, are you there, Sir?

MR. BENNETT: Yes. I'm here. Can you hear me okay?

CHAIR NIERMANN: Loud and clear. Thank you.

MR. BENNETT: Okay.

CHAIR NIERMANN: Go ahead when you're ready.

MR. BENNETT: Okay. Thank you. Good morning, Mr. Chairman, Commissioners, General Counsel. My name is Craig Bennett. I'm with the Law Firm of Jackson Walker, and I represent the Port Aransas Conservancy, one of the protestants in this case.

So I know every case is difficult, but I believe the decision here is clear. This is not a case where landowners are simply asserting 'not in my backyard' complaints, or where the applicant failed to comply with a small technical detail. No, this is a case where the leading aquatic life experts agree that

the site of this proposed discharge is a terrible idea. These scientists from the University of Texas Marine Science Institute, and Texas A & M Corpus Christi, testified that the proposed location for the discharge from this desalination facility is the worst possible place to put it along the Texas coast. Not one, but two administrative law judges recognized the potential harm from this facility, and they have recommended that this permit be denied. Those judges agree with the protestants on six of the nine referred issues - not just one or two issues, but on six of the nine referred issues, the judges found against the Port. Your own Executive Director also now agrees that this permit cannot be issued on the record before you.

So really, the only question before you now is whether you remand this application, or deny it outright. I believe the record clearly demonstrates that you should deny it outright, because the ultimate problem with this application cannot be fixed on remand - mainly, the Port would have to move the discharge location from the Aransas Pass, into the Gulf of Mexico to alleviate the potential harm from this facility.

Now, the Port already moved the intake location

out into the Gulf because of concerns regarding the impacts on aquatic life. And it would have to also move the discharge location, as well. Unless it does that, a remand does absolutely nothing to fix the biggest problem with this application.

Now, just a few years ago, in the Altair case, which is Docket Number 2018-00-13-IHW, the Executive Director recommended a remand. But you recognized that a remand was not appropriate in similar circumstance, and you denied the permit outright. You should do the same today.

This case reminds me of an electric transmission utility line case from a few years ago, in which an electric utility wanted to place a transmission line across a portion of Palo Duro Canyon. Now, the Public Utility Commission rejected that proposal, of course, because it was a terrible idea to have a transmission line across one of our valued state treasures.

Similarly, the Port's proposal here is a terrible idea. The Aransas Inlet provides the main corridor for larvae to get to the spawning grounds in the Gulf, to nursery grounds in the Inner Bay. And the Port wants to discharge hyper-saline wastewater containing twice the salt content of the ambient water

in the Aransas Pass, directly into the heart of that corridor.

I presented a map showing the location of the proposed discharge for your benefit, so you can see exactly what I'm talking about. This location is like permitting a toxic waste dump on Interstate 35 in downtown Austin. It's an idea that should be rejected out of hand. To be clear, though, this case is not about opposition to desalination plants. Desalination is a valuable technology, serving a good purpose. But in seeking the permit of the first desalination plant in the state, the Port has chosen a horrible location. It's one that the Director of the Coastal Fisheries Research Program at the University of Texas Marine Sciences (unintelligible), quote, "literally the worst possible location" - end quote.

Another expert, Dr. Greg Stunz, the Director of the Center for Sport Fish Science and Conservation at the Harte Research Institute at Texas A & M Corpus Christi, said this about it. Quote, "If I had to choose the absolute worst location on the Texas coast, from an ecological perspective, to place a desalination plant, I would choose Harbor Island in the Aransas Pass Inlet." End quote. Dr. Stunz went on to say that, quote, "Discharging 96 million gallons

a day into the heart of this ecosystem would, in my opinion, be catastrophic." End quote. Now, scientists are not usually prone to hyperbole. And Dr. Stunz, by the way, is the only witness in this case with prior experience evaluating the virtues of a location for a desalination plan. He was hired by the City of Corpus Christi to perform a (unintelligible) analysis of such a plan. And he was responsible for assessing locations for the discharge of brine from such a plant. He testified that Harbor Island was not even given serious condition by the City of Corpus Christi, because there's so many better alternatives with less adverse impacts.

Now, the Texas Parks and Wildlife Department, and General Land Office issued a report specifically identifying appropriate locations for desalination plants on the Texas coast. That report says almost the entire Texas coast is appropriate - but specifically excluded five sites, one of which is exactly where the Port wants to put the plant in this case. Now, the Port will tell you that report was prepared for expedited permitting only. But that misses the point entirely. The whole purpose of the report was to determine appropriate locations for desalination activities so the expedited permitting

process could be used for those locations.

Now, TCEQ's own preamble to its rules, under Chapter 18, the Texas Water Code, recognized this purpose, stating, quote, "House Bill 2031 requires the Texas Parks and Wildlife Department, and the Texas General Land Office to conduct a study to identify zones in the Gulf of Mexico that are appropriate for the diversion of marine seawater and the discharge of waste resulting from the desalination process." End quote. Therefore, even you, TCEQ Commissioners, have recognized the purpose of the report is to determine appropriate locations for desalination activity.

So it is sadly ironic that the Port has chosen one of the few places excluded by the report for such activity. Not only that, but the location the Port has chosen is directly adjacent to the Redfish Bay State Scientific Area. So not only is it a terrible location from an aquatic life standpoint, it's also immediately adjacent to a State Scientific Area. It's almost as if the Port's criteria was to find the worst possible place for a desalination plant.

Six different experts from a variety of backgrounds - academics, who studying the marine environment for a living, researchers, former regulatory staff of the TCEQ's predecessor - all

testified against this permit. These are well respected scientific minds. They're not consultants hired to support a specific position. Even before they were retained by PACC (phonetic), four of these experts expressed serious concerns about the location of the proposed facility. They did so not because they had an ax to grind, or were paid to take a position - but simply because they are marine ecologists with years of work studying the systems involved, and who understand the highly sensitive ecology in this area.

Now, the Port attempts to paint these experts as biased because of their public comments against this proposed facility. But to the contrary - those comments show that these experts actually believe what they are saying - namely, they understand the harm a desalination plant presents to the sensitive ecology in this area, and they, as scientists, cannot stand by and do nothing, and let a potential ecological disaster occur.

So, knowing that this is a highly sensitive ecological area, did the Port do a heightened analysis to ensure the protection of aquatic life? No. Quite the contrary - this case was referred to SOAH in December of 2019, on a draft permit the Executive

Director was ready to approve. Before SOAH could hold a preliminary hearing, though, attorneys for Port Aransas Conservancy took the deposition of the Executive Director's staff witness, and demonstrated how the modeling used by the Port and reviewed by the Executive Director was wrong, and the discharge would violate the permit. Because of that deposition, the Executive Director went back and changed the draft permit. But because staff had no numerical criteria for evaluating the impact of the concentrated brine, the Executive Director simply loosened the permit limit to allow about 10 times more salinity in the discharge. That is the equivalent of raising the speed limit to whatever speed you intend to drive, rather than setting it at a speed determined to be safe.

The change did tighten the permit for many pollutants, but not salinity, the main constituent in dispute here. And it's a constituent that could cause tremendous harm to the marine environment and aquatic life.

Now, this bears repeating. The ED admitted the modeling error that underpinned its anti-degradation review (unintelligible) permit limits, and soon also, the Port also admitted the error. At this point, the

public and you would expect that the Executive Director and the Port would have sought to remand the application to reevaluate the impact of these unexpectedly and dramatically high salinity increases. Instead, the ED simply revised the draft permit limits to allow worse mixing of the salinity, and greater risk to larvae and other early life stages of fish and shellfish. Neither the Executive Director, nor the Port asked for a remand then, although they clearly should have, given the modeling errors the draft permit was based upon.

Now, the expert testimony demonstrates that hyper-salinity is lethal to much of the early life stages of aquatic life in the area. And this area is one of the most critical along the Texas coast for commercial, recreational, and sport fishing, representing millions of dollars to the Texas economy. There's no reason to jeopardize that, when there are so many other places that could be chosen for desalination activities.

Now, the Port argues that the hyper-saline discharge is of no concern because they claim it results in just a 1% increase in salinity in the Corpus Christi Ship Channel. However, that number is incredibly misleading, because it looks at the broader

water body - which, by the way, is a completely arbitrary selection - rather than the specific area where the discharge will occur.

Now, the discharge will occur in the Aransas Pass Inlet, which is a critical pathway for the migration of the earliest forms of hundreds of species of aquatic life - which literally float on the currents, and they lack the ability to do anything to avoid the discharge. In that location, in the zone of initial dilution and the other mixing zones, the salinity change is not 1%, but greater than 60% at times. That's a level that experts say would be catastrophic to spawning fish populations.

Now, I want to briefly turn to the judges' recommendation, and I want to touch on a couple of points. The judges here recommended denial because they found in favor of protestants on six of nine referred issues - all of the most significant issues. Among other things, the judges found - 1) The Port has not shown that the proposed discharge will not adversely affect the marine environment, aquatic life, or other wildlife. 2) The Port had not shown that the proposed discharge will not adversely affect recreational activity, including commercial fishing and fisheries. 3) The Port had not shown that the

modeling complied with the applicable regulations to ensure the draft permit is protective of water quality. And 4) The Executive Director's antidegradation review is not accurate.

Now, ultimately, the Port had argued that the judges incorrectly applied the no lethality standard from TCEQ's rules. But all the experts, including two of the Executive Director's witnesses, and a Port Zone expert testified that the no lethality standard applies. And that standard is set out twice in your rules. The courts have been very clear that it is a reversible error for an agency to not follow its own rules. The no lethality standard does apply, and it must be followed.

However, even if TCEQ rules did not contain the no lethality standard, the judges' analysis of the six issues decided against the Port still clearly supports denial of this permit, not a remand.

I want to conclude with this. The decision you make today has the potential to dramatically affect one of the treasured bays and coastal economies in Texas. Contrary to the Port's assertions, denying this permit does not set a precedent that no discharge from desalination plants can ever be authorized by you. Rather, denying this permit will demonstrate

that you believe in sound science, and in protecting both the environment, and critical economic activities, like commercial and sports - sport fishing along the Texas coast.

The evidence is clear. This permit must be denied. This location for this discharge is terrible. And ultimately you - all the science dictates that this permit should be denied, and remanding it --

FEMALE SPEAKER: That's time.

MR. BENNETT: -- will do nothing to fix that. Thank you.

CHAIR NIERMANN: Go ahead, finish up, Mr. Bennett.

MR. BENNETT: Okay. That, that was my closing - just, a remand will do nothing to fix the discharge location, which has to be moved. Thank you very much.

CHAIR NIERMANN: Mr. Bennett, thank you very much for your presentation. I appreciate that. Colleagues, any questions for Mr. Bennett? Commissioner Lindley?

COMMISSIONER LINDLEY: No questions. Thank you.

CHAIR NIERMANN: Mr. Janecka?

COMMISSIONER JANECKA: Not at this time. Thanks.

CHAIR NIERMANN: Thank you. Colleagues, I'm sorry to keep doing this, but let me, let me pause on Item Two for now, and see if we have Representative Cook available to, to address the Commission on Old Business Item One. Representative Cook, are you there?

REPRESENTATIVE COOK: Yes, Sir, I'm finally here.

(SKIP TO 43:15 - PROPOSAL FOR DECISION, ITEM 2)

CHAIR NIERMANN: Colleagues, let's return to Item Two, and Ms. Smith, just so we're minding our Ps and Qs, I'll have you read the caption again, please.

MS. SMITH: Item Number Two is the consideration of the ALJs' PFD and proposed order concerning the application by the Port of Corpus Christi Authority, for a TPDES permit.

CHAIR NIERMANN: Thank you, Ms. Smith, and colleagues, and, and parties again, I apologize for chopping up the presentation on Item Two. It's just a difficult time. We want to hear from our elected representatives, and it's, and it's hard to do that during the Legislative Session. So I'm glad we could fit all that in.

Next up is the presentation by the Executive Director. And I'll ask you to identify yourself, and

go ahead when you're ready.

KATHY HUMPHREYS: Good morning. I'm Kathy Humphreys with the Water Quality Division. I - well, I'm sorry. Let me start over. I'm Kathy Humphreys with the Environmental Law Division. With me today are Peter Schaefer, Shannon Gibson, and Katie Cunningham of the Water Quality Division. I'm going to limit my remarks to three specific topics - the Executive Director's request for remand, concerns over potential toxicity, and the appropriate use of the Texas Parks and Wildlife, General Land Office Study.

Following our standard practice, the Executive Director used the CORMIX model to evaluate the Port of Corpus Christi's proposed discharge. The depth of the diffuser is a critical input to the CORMIX model used by staff to determine the effluent percentages at the boundaries of the regulatory emission zones. The effluent percentages predicted by the CORMIX model are used to establish water quality based effluent limits, biomonitoring parameters, and in the antidegradation review.

During the course of the Administrative Hearing, the Executive Director learned that the diffuser would be located at a depth of approximately 90 feet, rather than 63 feet as represented in the

application. Also during the hearing, there was discussion about the Executive Director's use of default ambient velocity values, rather than a site specific ambient velocity. Because of this new information, the Executive Director respectfully requests the Commission remand this application to SOAH, to take additional evidence on the ambient velocity, actual depth and flow of the channel at the proposed diffuser location, and for additional consideration of the other issues that rely on the CORMIX model.

To ensure the draft permit complies with all applicable regulatory requirements, after the model is rerun with new input, other water quality permitting staff will need to evaluate the impact of the model results on the antidegradation review, damage review, and the draft permit. These reviews correlate with referred issues - A) whether the proposed discharge will adversely impact the marine environment, aquatic life, and wildlife, including birds, and endangered or threatened species, spawning eggs, or (unintelligible) migration; Issue C) whether the proposed discharge will adversely impact recreational activities, commercial fishing, or fisheries in Corpus Christi Bay and the Ship Channel; D) whether the application and

representatives therein are complete and accurate; G) whether the modeling complies with applicable regulations to ensure the draft permit is protective of water quality, including using accurate inputs; H) whether the Executive Director's antidegradation review was accurate; and I) whether the draft permit includes all necessary and appropriate requirements.

Additionally, the Executive Director recommends that the duration of the hearing on remands be 120 days from the date of the preliminary hearing, to the issuance of the administrative law judges' proposal for decision.

The next issue I will address is the potential for toxicity from the Port of Corpus Christi's discharge. In addition to remanding the application to SOAH for additional evidence, the Executive Director respectfully requests the Commission find that any potential toxicity in the Port of Corpus Christi discharge will be addressed through whole effluent toxicity testing.

It is important to note that based on the requirements in 30 TAC Section 307.6E, and the threshold criteria established in the 2010 Implementation Procedures, a whole effluent toxicity review, also reviewed - referred to as a biomonitoring

review, was not required for the Port of Corpus Christi's proposed discharge. However, based on public comments, the Port of Corpus Christi voluntarily to include biomonitoring requirements in the draft permit. The draft permit includes requirements for the 24-hour acute WET testing, and 48-hour WET testing.

The purpose of biomonitoring is to directly measure the aggregate toxic effects, in terms of lethality, and sub-lethality on sensitive surrogate species, including vertebrates and invertebrates, when exposed to effluent at the critical dilution of the receiving waters. More simply put, biomonitoring evaluates effect of the discharge on test species.

The last issue I will address is the importance of the Texas Parks and Wildlife, General Land Office Study. This study was required by HB-2031 from the 84th Legislature, which created New Texas Water Code, Chapter 18, relating to marine seawater desalination projects. Section 18-005E requires the TCEQ to provide an expedited procedure for acting on an application. (unintelligible) 005G requires that the Texas Parks and Wildlife Department, and the Texas General Land Office recommend discharge zones, where permittees with permits issued under Chapter 18 are

authorized to discharge. Chapter 18 does not limit discharges permitted under Chapter 26 to the discharge zones described in the study. Thus, the study not - should not be used to evaluate applications submitted under Chapter 26.

Because the application for the Port of Corpus Christi was submitted under Chapter 26, the location restrictions in Chapter 18 do not apply to the application, and should not have been considered as conclusive by the administrative judge. Thank you, and we're available for questions.

CHAIR NIERMANN: Thank you, Ms. Humphrey, appreciate the - Humphreys - I appreciate the presentation. I don't have any questions at this point. Colleagues, any questions or comments? Commissioner Lindley?

COMMISSIONER LINDLEY: No questions. Thank you.

CHAIR NIERMANN: Commissioner Janecka.

COMMISSIONER JANECKA: I have one question, I'd like to try to start to carve into with ED staff while, while we have them available right now. Ms. Humphreys, I'm just curious - could you comment at all on what extent the WET testing may inform Agency staff about the, the degree of lethality that - or toxicity

that, that it may pose, the, the discharge from this permit application may pose for - you mentioned it, it will measure lethality for vertebrates and invertebrates. I'm, I'm curious - does this capture the larval lifecycle stage of the fish that, that - the aquatic life forms that were of such interest in, in this item, and the discussion at SOAH.

KATHY HUMPHREYS: Commissioner Janecka, I think this would be - best be addressed by Peter Schaefer of the water Quality Division.

PETER SCHAEFER: Hi, Commissioners, Chairman. This is Peter Schaefer of the Water Quality Division. Our biomonitoring testing requirements in this permit are two-fold. There's a 24-hour, acute biomonitoring test, and a 48-hour, acute biomonitoring test. Now, the - these tests are just looking at lethality They're not looking at growth and reproduction. That would be a chronic aquatic - that would be a chronic toxicity test.

CHAIR NIERMANN: Mr. Schaefer, let me, let me just add a - maybe a clarifying question. Lethality - does it, does it consider lethality to, to, to life in the larval stage? Or is it all stages? Or just, just adult stages? Or, or - how, how is that done?

PETER SCHAEFER: In this case, it is adult

stages. It is the - the test species are the Mysid shrimp, and the inland silverside.

CHAIR NIERMANN: Okay. I appreciate that. Commissioner Janecka, did that answer your question?

COMMISSIONER JANECKA: It did. Thank you.

MS. SMITH: And, and may I remind the Commission that because this is oral argument, and not an opportunity to testify, we probably should stick to responses from counsel, based on, on record - of record.

CHAIR NIERMANN: Thank you, Ms. Smith. That's a, an appropriate admonition, and I - we all appreciate it. Colleagues, any other questions for staff at this point? All right. Let's turn to the Office of Public Interest Counsel. Mr. Wayne, are you with us this morning?

MR. WAYNE: Hey, good morning, Chairman, Commissioners, General Counsel, and the Executive Director's attorneys and staff. I am Sheldon Wayne with Office of Public Interest Counsel. And after considering all the evidence, and the argument that's been presented in this matter, including all post hearing filings, OPIC urges the position that was taken in our closing argument - that the Port of Corpus Christi Authority's application should be

denied. And further, we do not support a remand to SOAH to take additional evidence.

If approved, this approved desalination plant will discharge a high salinity of fluids into the Corpus Christi Ship Channel, near the confluence of the Corpus Christi Channel, the Lydia Ann Channel, and the Aransas Pass Inlet. This inlet connects the Aransas Bay with the Gulf of Mexico, and it's the only tidal inlet in the area. It is a region that is home to important aquatic species at the most vulnerable times of their lives - namely, their larval stages. In light of the vital importance of the spawning ground, and the larval migratory route that could potentially be affected by the proposed discharge, this application does merit a high degree of scrutiny.

This is a highly complex application, and the contested case featured nine referred issues. Therefore, I will use my time to comment on the most disputed issues.

Regarding the legal standard for evaluating the impacts to aquatic organisms - OPIC agrees with the administrative law judges, that based upon the plain language of the rules, the no lethality standard that's contained in Title 30 of the Texas Administrative Code, Section 307.9B2, is the correct

standard. The standard is contained in TCEQ's Rule, Applied Texas Surface Water Quality Standards, excuse me - and is entitled Application of Standards. It does not contain any exceptions, and it specifically applies to mixing zones. It states that acute criteria, and acute total toxicity levels may be exceeded in small zones of initial dilution at discharge points of permitted discharges - but, importantly, there must be no lethality to aquatic organisms that move through a zone of initial dilution.

Expert witnesses, including the Port Aransas Conservancy's witness, Dr. Andrew Esphaw (phonetic), the Executive Director's witness, Dr. Marianne Wallace (phonetic), and the Port Authority's own witness, Dr. Leall Tischler (phonetic), all agreed and confirmed that TCEQ's rules permitted any lethality within that zone of initial dilution. The alternative, no significant lethality standard contained in Section 307.6E1 that's been advocated by the Executive Director and the applicant, applies only to measuring the impacts to aquatic organisms when conducting biomonitoring of the fluid samples under the specific guidelines applicable to whole effluent, which is also known as WET testing. It does not apply to evaluating

impacts to organisms that are actually traveling through the zone of initial dilution.

There are obviously two standards here. The biomonitoring required by WET testing evaluates acute toxicity to aquatic organisms over an extended period of time. It makes sense that over a longer period of time, exposure could result in some deaths to the aquatic organisms, as long as there's no significant lethality.

In contrast, while aquatic organisms are exposed for a much shorter period of time, while actually traveling through the zone of initial dilution, there should be no lethality. Additionally, application of the no lethality standard results in a harmonious reading of the rules, and one that ensures all words are given effect. If the no significant lethality standard were to - were to apply as broadly as recommended by the Executive Director and applicant, Rule 307.8B2's express requirement that no lethality occur in the zone of initial dilution would be rendered meaningless, an outcome that should be avoided, if possible.

Now, regarding the modeling that was performed, and relevant to a number of issues, the administrative law judges found that there were many shortcomings in

the CORMIX model - among other things, it utilized inaccurate and unrepresentative (unintelligible) and ambient water velocity data; a diffuser design that will not achieve permit limits; and ignored the presence of an eddy and resulting hole located directly at the proposed diffuser's location. Because the model used these inaccurate inputs, the tests - sorry, the results it produced provide no assurance that the draft permit is protective of water quality.

Regarding Issue A) - OPIC agrees with the administrative law judges that the Port failed to carry its burden in proving that the discharge will not adversely impact aquatic life. Protestants presented compelling evidence that a vast number of larva are likely to be adversely affected, and indeed, killed, because they lack the ability to swim, and the currents will carry them through the mixing zones, including the zone of initial dilution. The Port did not rebut this evidence with any convincing showing that the larvae would not suffer lethal effects. And as previously discussed, the Texas Surface Water Quality Standards require that there be no lethality to organisms that move through that zone of initial dilution.

Regarding Issue C) - OPIC agrees with the ALJs

that adverse effects to larva organisms could cascade and cause harm to fisheries and commercial recreational fishing.

Regarding Issue D) - OPIC agrees with the ALJs that the application is not complete and accurate. In addition to the errors related to the CORMIX modeling previously discussed, the application inaccurately identifies the diffuser height and channel depth at the location of the outfall.

Regarding Issue H) - OPIC agrees with the ALJs that the antidegradation review was not accurate, and did not ensure that the discharge complies with - with substantive antidegradation standards.

Regarding Issue I) - OPIC is respectfully recommending denial of the permit. But if the Commission disagrees and is inclined to issue the draft permit, OPIC maintains its position that it does not include all appropriate and necessary requirements. Among other things, the description of the zone of initial dilution is ambiguous, and it would be reasonable to include a six month deadline for completion of the ambient water velocity study.

Finally, regarding the Executive Director's currently pending motion to remand, OPIC takes the position that remand is inappropriate. The equities

here favor denial of the permit. Remand is sought in part to evaluate the effects of an eddy in a hole that increased the depth of the channel bottom at the discharge location, from the 63 feet, as identified in the application, to 90 feet. However, this hole has existed for many years, and has been identified in Army Corps of Engineers surveys since at least 2011. The Port chose to ignore these characteristics of the discharge location, and instead submitted, and continues to defend, a materially inaccurate application - inaccuracies which the protestants have identified, and which has already resulted in revision of the draft permit after this matter was referred to SOAH.

The protestants have expended considerable resources litigating this matter, and under these circumstances, it would be unfair to allow the Port another opportunity to meet its burden on this application.

Additionally, OPIC notes that at any point prior to the issuance of, of the Proposal for Decision, the Port could have explored withdrawing its application without prejudice, which would have allowed it to correct, and resubmit. This course of action would have conserved all parties' resources,

including those of the TCEQ, and SOAH. Instead, the Port elected to proceed with the contested case hearing process, and see this matter to its conclusion.

Considering all of this, it seems appropriate to OPIC that the applicant be held to that choice. And it is for these reasons that OPIC respectfully recommends denial of the motion to remand.

OPIC further recommends the Commission adopt the ALJs' Proposal for Decision, and deny this application. Finally, OPIC recommends the Commission sustain and incorporate the proposed changes as set out in the ALJs' reply letter. Thank you, and I'm available for any questions.

CHAIR NIERMANN: Thank you, Mr. Wayne. I appreciate your presentation. I have none. Colleagues, any questions or comments? Commissioner Lindley?

COMMISSIONER LINDLEY: I have no questions. Thank you.

CHAIR NIERMANN: Mr. Janecka.

COMMISSIONER JANECKA: None. Thank you.

CHAIR NIERMANN: Thank you. And Mr. Wotring, you've - you have four minutes for rebuttal, Sir.

MR. WOTRING: Thank you. Good morning. Let me

hit on some of the more important points that were just addressed. First, the Port Authority is trying to carry out its local government function to address the important interests of the 400,000-plus residents in Nueces and San Patricio Counties, and to make every effort, as the Texas Legislature directed, to secure and develop plentiful and cost effective water supplies to meet the ever increasing demand for water. There is no local government, no other persons opposing the Port Authority's efforts, except for one nonprofit, and a handful of individuals.

With regard to statements from the protestants that this is not a matter of not being in their backyard - their own expert, who was referred today said, and I'm quoting, "I probably should not say it out loud, but I, too, am biased in my opinion about this facility. If nothing else, I just don't want the damn thing built here.'

With regard to the location of this facility - it is appropriate. The evidence in the record establishes that because of the enormous tidal activity in the area, that means that the 95 million gallons per day will be diluted to no more than one-half of one percentage point of the total tidal volume in the area of discharge - one-half of one percent.

Claims about it being in the wrong location are not supported by any specific data, but by the protestants' experts, who have not provided a reliable basis for those opinions; or, as the protestants admitted in their briefing, the - their experts have made clear that specific data is not necessary for their opinions as to some of the deficiencies they identify. They have provided qualitative opinions, not supported by data, and that would not be admissible in any civil court in the state of Texas.

Let me reserve a fair amount of time here to make sure that the Commissioners understand not only the Port Authority's view, but also, the Executive Director's review on the interpretation of whether there is a no lethality standard in the zone of initial dilution, or no substantial standard. According to the Executive Director, if the Commissioners sign off on the proposed - Proposal for Decision, the Conclusion of Law Number 10, then it would mean that if any organism were to die in the boundaries of the ZID, regardless of the circumstances, such an instance would be impermissible under Texas law. Under this interpretation, even single-celled organisms such as phytoplankton that are caught in the turbulence and subsequently die would

present a fatal flaw in every TPDES permit. Such a conclusion is illogical in an ecosystem that functions under typical biological processes, even if the effluent flow were simply redirected to (unintelligible) Channel water.

In our view, if the court were - if the Commissioners were to sign off on the Conclusion of Law Number 10, it would have a vast and negative impact, not only on this permit, but hundreds of existing and proposed permits - and proposed permits.

The Port Authority has been, and is willing to consider any and all improvements to the permit, to permit - and everyone to understand that it is protective of the marine life, and the environment, including enhancements to WET testing, or other permit requirements.

We want the opportunity to carry out the Legislature's commandment that we make every effort to provide drinking water for the people in the area of (unintelligible).

FEMALE SPEAKER: That's time.

CHAIR NIERMANN: Thank you, Mr. Wotring. Colleagues, any questions for Mr. Wotring?

COMMISSIONER LINDLEY: None for me.

CHAIR NIERMANN: Commissioner Janecka?

COMMISSIONER JANECKA: I don't believe so. Thank you.

CHAIR NIERMANN: Thank you. I do have a question. I'm not sure if - if they'll have an answer for - for both Mr. Bennett and Mr. Wayne. I'll begin with Mr. Bennett - same question. And that is, we just heard that - Mr. Wotring's view that accepting Conclusion of Law 10 - we're talking about the standard for lethality in the, in the ZID. His, his reading is that any death in the ZID would be impermissible, even a single-cell organism. And I wanted to get your reaction to that, beginning with you, Mr. Bennett, whether you think that's a, a, a correct understanding, or what your view is, generally - or perhaps, if you haven't formed a view about it. But Mr. Bennett, go ahead when you're ready.

MR. BENNETT: That - yes. I, I think that it's a difficult question to answer, because I think it becomes very fact specific, meaning looking at what are we talking about in, in a particular case. Ultimately, I think one of the problems here is, we're not talking about a single-cell organism. We're talking about fish larvae that are clearly significant. To the extent that you want to interpret in the - the no lethality to apply not to single-cell

organisms, there may be some room for that. I don't know the scientific basis. I think there'd have to be some evaluation. Clearly, there was a reason that the Commission adopted that language in their rule, and it's there.

And, and where - I mean, partially - what's important to note is, that's in the rules, regardless. I mean, whether it applies to other sorts of constituents, whether it applies to salinity - it's there. It's not just something that would apply to desalination. It's something in your rules that applies to, you know, a number of different things related to water discharge.

And so, ultimately, yes, you have to wrestle with how that applies. I think certainly it applies to larvae, which are, you know, significant to the growth of, of adult fish populations. They're the, they're the underpinning of it. Single-cell organisms? I don't know. I guess we would have to factually look at the specifics of a case. I certainly don't think that the adoption of the no lethality standard - which again, has already been adopted in your rules - would be the death knell for desalination, or any other wastewater permit. So I, I, I guess I'm not sure I can answer that, because I

think it's a very scientific, and fact based inquiry that goes into each case, depending on what sort of organisms we're talking about.

CHAIR NIERMANN: Thank you, Mr. Bennett. Mr. Wayne, let me put the same question to you - as a, as a - and, and this is really a question of legal interpretation. How does the Office of Public Interests view this as a statement of, of law, if I can frame it that way, and, and it's - whether it's correct that any death in the zone of initial dilution is impermissible, including even the death of a single-cell organism - if you have a reaction to that, go ahead.

MR. WAYNE: Absolutely. And thank you, Chairman. You know, I - what, what OPIC really rested the, the basis for our position on was the plain language of the rule. It - the rule says that there is - no lethality should occur. And, and we think that that's a workable rule. It's been in the Texas Administrative Code, and in effect for many years. And that same language appears in multiple places, in addition to 307.8B2; it also appears in 307.6. And I believe that it appears in - I apologize - I, I am grappling for that exact citation. In 307.6B6, I believe it appears, as well.

It, it's, it's unknown why that standard would be workable in some circumstances, but not others, as advocated by the Executive Director and, and the Port. And, and here, really, it's a, it's a matter of the location that, that was chosen. The Port has location that's home to many vulnerable organisms, at indeed, the most vulnerable stage of their lives. If a, a different location was chosen, we think that, that the circumstances would be materially different, and there wouldn't be near as much of a concern, or the concern would certainly be lessened, if not, you know, minimized, or, or reduced entirely - that organisms would, would not suffer lethal effects. We think that that could be achieved easily in a different location, and it's simply because of the extremely sensitive nature of this location that the Port has such trouble making that showing.

I, I do think that it would be a little bit illogical, and - to apply this same line of reasoning all the way out to single-celled organisms. I don't believe that the Commission even considers single-cell organisms. But I'm not a technical expert. So I, I believe that that would be a, an absurd result, and, and that would be, you know, my kind of legal reasoning on, on that - on the spot.

CHAIR NIERMANN: Thank you, Mr. Wayne. I appreciate it. And I'm sorry to put you - I'm sorry, Mr. Bennett - sorry to put you both on the spot, but Mr. Wotring raised the issue, and I was curious about it. So, I - I do appreciate you taking a stab at, at an answer.

MR. WAYNE: Oh, no apology necessary. I wish I had formulated a slightly better answer for you both.

CHAIR NIERMANN: Well, you're - you can't anticipate every question you might get. But thank you for that. Colleagues, any questions for any of the parties at this point?

COMMISSIONER LINDLEY: No questions. I thought that was a great question, and appreciate both gentlemen responding.

CHAIR NIERMANN: Thank you, Commissioner Lindley. Commissioner Janecka?

COMMISSIONER JANECKA: I just really can't help but want to ask a question because it seems so simple and obvious to me. I think this would be best directed to Mr. Wotring. And, and it simply goes to the - helping me understand, so that I can help explain to the public when inevitable intense focus and attention continues on this, this new area of our, our state's search for water, for the public. And,

and that is simply, do - have - has your client looked into, and, and given a, an explanation - and I'm not sure that it really bore out very explicitly or clearly in the record - but what, what's the answer for why there was a, a discrepancy between the depth of the bottom at the discharge point of the outfall, of, of 60, approximately 60 feet, versus 90 feet?

MR. WOTRING: Because there was a localized eddy that changes the, the bisymmetry at that exact location. And they - in our view, and I - we think our expert testimony provided this in the record - that that eddy and that localized increase in depth enhances the mixing, and makes, makes existing modeling more conservative.

The ALJs disagreed, and they wanted more specific data. That's the type of data that we think we can provide that will show that being deeper, and having more current enhances the mixing, and provides more protection for marine life and the environment. And I'm hoping that answers the question. They - if - yes, of course in retrospect, we, we, we'd provide a much more complete choice of the localized bisymmetry in the area, to avoid exactly these issues.

COMMISSIONER JANECKA: I appreciate that. And, and I wonder - as a final question, if you might

respond to the questions that have been raised by the other commenters about, about your client's decision to continue on and proceed with the application, past the point of being made aware of, for instance, that, that discrepancy - in the data in the application versus conflicting data from elsewhere. Could you possibly speak to the --

MR. WOTRING: Well --

COMMISSIONER JANECKA: Would you care to respond to that?

MR. WOTRING: Yes, I - yes, of course. Happy to, happy to have - to respond to that. Again, for, for issues like the bisymmetry, and the tidal ambient velocity, and the eddy flow - it was our view that those additional, the localized factors made the existing modeling more conservative, and meant that if you factored those things into the modeling, they would be - that you would have enhanced mixing, and enhanced solution, and be more protective of, of the environment. And we believe the administrative record bears that out.

But, you know, the ALJs disagreed with that. That's the kind of things we, we can provide. It - the, the reason the Port continues, because we thought the localized matters made our model more

conservative, not more risky for the marine environment. And, and I will say that there is a time component in trying to get desalinization permits. We understand the process. We also understand the urgency of the need in the area, and backing up, and trying to start over is going to take us back at least two, possibly three years. And the Port Authority, as a local government entity, is very concerned about the next drought in which there will be no alternative source of potable water for the people, or industry in the area.

MR. BENNETT: Commissioners, may I briefly - this is Craig Bennett, on behalf of Port Aransas Conservancy. I would just like to briefly make one quick point, if that's okay, to something Mr. Wotring just said.

And that is, ultimately, it would have been easy for the Port to just do alternate modeling. They could have modeled both. And so the idea that, 'Oh, well, we just took the conservative approach, so...' That really falls on deaf ears with me, because it's like, just do both. Have both ready, because you know you're not using accurate data. So I - to me, that would have been the easy solution, and then everybody could have had a hearing, evaluating both.

CHAIR NIERMANN: Thank you, Mr. Bennett. And thank you, Mr. Wotring, for your explanation, as well. Commissioner Janecka, did that answer your question sufficiently?

COMMISSIONER JANECKA: (unintelligible) no other questions for me at this time. Thank you.

CHAIR NIERMANN: Okay. Well, colleagues, let me, let me share my thinking on this, and just kind of starting at the basics. The, the Legislature created a framework for authorizing desalination facilities that are protective of public health and the environment. And of course, our agency has promulgated implementing regulations, and now we're getting a chance to test those in a first of its kind application. And my observation is, things could have gone smoother - not unexpected that things were bumpy in a, in a first of its kind application; but they could have gone smoother.

I do, though, think that the process is working, and that the protestants have raised legitimate questions about the protectiveness of the proposed authorization. And now those questions can be addressed.

So the ALJ identified several instances in which the applicant failed to meet its burden. They

almost all trace back to the inaccurate inputs to the CORMIX modeling that we've been discussing this morning, specifically the bisymmetry and the velocity data.

And what I ascertained in preparing for this item today, and what we've just heard from the applicant, is that the applicant had an opportunity, but did not take the opportunity to correct the inputs, on the believe that these were errors on the side of caution. In other words, the applicant thought the errors made the modeling more conservative. You know, we can now all appreciate that that is not an entirely safe assumption. We simply - we simply don't know. And so it makes sense that - to, to, to look at that. I mean, it may have been helpful, to Mr. Bennett's point, to, to have already done that work. It's not done. I think we do still have an opportunity to do that.

And of course, the questions about the CORMIX inputs have raised questions about the diffuser design, the antidegradation review, impacts to fisheries, and, and so on.

So I do think we have two paths here. We could accept the protestants' invitation to deny the application, or the Executive Director's invitation to

remand the matter, to take additional evidence on the six issues that staff identified.

And I, I really do think there are equitable arguments on both side. And I appreciate the burden this matter has already placed on all of the parties. But in my view, the weight of the equities, and the better policy is to remand the matter, so that we can determine whether the proposed authorization is indeed protective, based on more precise data inputs. And so that's, that's what I would propose.

I do want to address the standard for lethality in the zone of initial dilution, and acknowledge that our rules are, are indeed ambiguous about whether there should be no lethality, or no significant lethality. And in my view, the more permissive rule, that is 307.6E1 is the correct standard. And in part, because the more, the more restrictive standard, the no lethality standard in Sections 307.8D2 and 307.6C6, that - those, those sections apply only to numerical acute criteria for toxic substances, and there's no numerical criteria for salinity, or salt. So that, in a nutshell is how I view that particular legal issue.

My view about remand - I do have a motion to that effect, that includes instructions on the legal standard, and the six issues to be remanded, as well

as some, some notes on scheduling with respect to the submission of additional information, when the preliminary hearing would occur and when the PFD would be issued.

But before I offer that, I would like to get a sense of, of how you view the matter, and, and whether you have different ideas, or reservations about a remand, or about my take on the legal standard or, or anything else. So let me pause there. And Commissioner Lindley, let me ask you for your thoughts.

COMMISSIONER LINDLEY: I'll keep my thoughts pretty brief. I think you addressed most of what I had jotted down as potentially saying today. You know, I've - everyone stated - Mr. - the applicant, and the protestants, you know, both attorneys for both, both groups, said - and I, I do completely agree, that there are - well, that I recognize all the potential positive impacts that desal will have for this state. And, and this issue is very, very significant for the future of water for our state. And so this one was really tough, mostly for that reason.

However, I - today, I don't - I'm not in a place where I would feel comfortable granting the

permit. And so like you said, the two options are remand, or to adopt the PFD. And I'm on - I'm supportive, and I'm, I'm on the same page, as I, I believe a remand is what's most appropriate today, and what I'd be comfortable doing. I think I have - I'm, I'm, I'm guessing our lists are somewhat similar.

I would be interested to hear, and we can let Commissioner Janecka talk first, but interested to hear your, your motion, especially on the lethalities, just to make sure I understand it completely. But I, I think we'll probably come down mostly the same on, on the issues. But anyway, I'll stop there. And I'm actually going to turn off my camera for one second, but I'm still listening. So I'm not going anywhere.

CHAIR NIERMANN: All right. Thank you, Commissioner Lindley. And just real quickly, my, my position on the, on the lethality standard is that it should be the, the, the standard for non-numeric criteria that's found at Section 306.6E1, which is the no significant lethality standard. That's what I would include in my motion. Commissioner Janecka.

COMMISSIONER JANECKA: Thank you, Chairman. I, I - first, first off, I, I think I'm in full agreement on, on the open question between which of those two ambiguous, somewhat ambiguous pathways, or, or which

standards would be applicable here. I, I think that the more permissive of the two, 307.6E1, is the appropriate standard to utilize in this case, given that there is no numerical value for salinity. The other two citations I think - I agree with you explicitly - refer and apply to conditions for which there are values.

But the, the, the - I appreciate you laying out the issue, as well. And I think that I'm, I'm also prepared to, to move forward with, with the remand today. And I think that the issues to that, and the issues that the Executive Director's staff agreed as appropriate for remand, (unintelligible) their, their motion I think is - or their filing - I, I'm in agreement with.

And I would, I would merely return back to the Executive Director's comments on, on the Texas Parks and Wildlife study. And, and I feel the need to chime a little bit to say that I appreciate ED staff making a, a very thorough evaluation of the, of the context from which that study came, and from which our agency officially will, will reference, and needs to acknowledge that. But I think I'm in strong agreement with the, with the conclusions of the ALJ in, in regards to that point, and just wanted to touch on

that while we're discussing the host of issues, and at the risk of forgetting to come back to this later.

So I'll, I'll toss in those last two cents, and, and just say that I'm, I'm - I would encourage ED staff to, to revisit where the ALJ made, made their findings around that study. And, and I think that to the extent that the ALJ highlighted that as a, a, a piece of, of valid information to, to be aware of and to consult in regards to a very sensitive, I would encourage ED staff to, to revisit that in that mindset, because I, I think that this is a very sensitive issue.

And stepping back - bigger, bigger issue, bigger picture - this is the first of what we hope will be many desalination facilities across our great state as we continue to grow, and have, have more and more population. And I think it's, it's imperative that we, we get it right. And for that reason, I think there's some really compelling public policy goals that there - are well served in being deliberate in how our agency considers it.

And I think - it appears to me that the real meat of this question - the technical question, in my mind, the open question is - is will the - will the release of, of this particular outfall, in a, in a

media where the life, the fauna are not mobile themselves, necessarily, and, and they may be moving through the, the emission source, which - I just have to observe, it's such a, a unique change of pace for us as an agency. We typically see the, the life - the, the fauna ambulatory, and they're able to go around the pollution sources. It's the exact opposite here.

But I think that, that - the questions that the protestants raise about the demonstration that ED is requiring, and the applicant is making - even to, to - volunteering, going above and beyond requirements to, to agree to the, the whole effluent testing, the biomonitoring it - which I appreciate - I think that it, it comes right up to the edge of the very important issue, which is - is there an open discrepancy about, about this permit and this facility.

And I think that there is a real public policy - a negative outcome - if our agency were to proceed injudiciously, too quickly, and that would be if - if a facility would be decided without that determination being appropriately made, I would hate to see other external factors affecting fish stocks, the, the Texas maritime economy, fishing industry - for whatever

reason, I would hate for a desal facility, the first, the first desal facility in the state, as timing may allow - to be blamed inappropriately, or incorrectly as the guilty party in a, in a - what we're all too used to seeing, in a very complex environmental, environmental question that's very difficult to answer with any, with any certainty.

I think if we don't try our utmost now to answer that question to the best ability - to the best of the ability that we can, or to put in the appropriate questions structured into the permit. I, I think that's a really important public policy outcome to, to be mindful of.

So I'll - I think I'm circling around that. I don't know that I have a really very concise point and, and I, I appreciate the time to chime in. Thanks.

CHAIR NIERMANN: Thank you, Commissioner. Yeah, I, I mean, fundamentally, our job here is - if we issue an authorization, our job is to make sure that that authorization is protective of public health and the environment, and in this case, especially the marine ecosystem. And you know, I think we're all in agreement that, that the applicant has not yet met his burden of proof on that. And, and that's really the

purpose for the remand.

Specifically to the Parks and Wildlife, GLO Study, since you brought it up, I'll just share my thoughts on, on this. And it's really - the analysis is, is, is really subsumed into that issue - a) that, that staff asked for a remand on, and that I would include in a remand motion, so I don't call it out specifically in, in the motion that I'll read in a moment.

But my view of that is, it is, it is neither controlling, nor is it irrelevant. It's not controlling, because it's a feature of, of our expedited permitting path, not this permitting path. But it's not entirely irrelevant, either. I think in my mind what it does is it identifies a sensitive area, and what, what that means to me is --

MALE SPEAKER: Yeah.

CHAIR NIERMANN: -- we need to be focused on this, and make sure that we are being careful in doing our job of making sure that the permit is protective. I think - I think Mr. Wayne phrased it as making sure that there is an appropriate degree of scrutiny for this application. And that's, to me, that's the relevance of that Parks and GLO study is, is this is - it - this is a, a sensitive area. I don't think

there's really a lot of dispute about that, but again, neither, neither controlling, nor, nor irrelevant.

Well, colleagues, let me do this. Let me - let me go ahead and read a motion. And then, and then invite any additional thoughts or comments.

I move that we remand this matter to SOAH for the ALJs to 1) apply the appropriate legal standard for non-numeric criteria found in 30 Texas Administrative Code Section 307.6E1, for evaluating the impacts to aquatic organisms that move through a zone of initial dilution. And 2) take additional evidence on the following issues: a) whether the proposed discharge will adversely impact the marine environment, aquatic life, and wildlife, including birds, and endangered or threatened species, spawning eggs, or larval migration. c) whether the proposed discharge will adversely impact recreational activities, commercial fishing, or fisheries in Corpus Christi Bay, and the Ship Channel. d) whether the application and representations contained therein are complete and accurate. g) whether the modeling complies with applicable regulations to ensure the draft permit is protective of water quality, including utilizing accurate inputs. h) whether the Executive Director's antidegradation review was accurate. And

i) whether the draft permit includes all appropriate and necessary requirements.

I further move that we - Number 3) set a 30 day deadline from the issuance of the Commission's order for the applicant to provide revised information to all parties, including the depth of the Channel, site-specific ambient velocity, and the depth of the diffuser. 4) allow the parties 30 days to review the revised information before setting a preliminary hearing. And 5) set the hearing duration for the proceeding at 120 days from the date of the preliminary hearing on remand, to the issuance of the Proposal for Decision.

So that is the - that is the end of my motion. And let me pause there, and invite any, any further discussion. Commissioner Janecka, you moved to the left of my screen for, for some reason. So reading from left to right, let me invite you to go, go first. Additional thoughts or comments?

COMMISSIONER JANECKA: Hazards of turning off your camera. I - I, I think I'm, I'm in agreement with that, with that motion. I, I'd be prepared to second it, if, if - and, and not seeing any concerned look from Commissioner Lindley, I'll, I'll go ahead and second that motion.

But getting onto discussion - I'm, I'm comfortable with that motion. I, I do have a question that I, I would want to just confirm - it wouldn't pose a, a logistical concern for, for the applicant on the 30 day deadline in this, in the proposed motion, to provide site specific ambient velocity. And I think - was that one of the factors that would have been proposed to be studied, which OPIC suggested - imposing a deadline, a specific deadline on providing that data - I just would love to make sure that that wouldn't pose any problems of setting a 30 day deadline for something that - I'd rather get the right value in our model, rather than a 30 day value, is what I'm trying to, trying to suggest here. So if, if those specific homework items aren't a problem or a concern for the applicant, then I'm, I'm perfectly comfortable. And then I don't have any other discussion.

CHAIR NIERMANN: Well, Commissioner Janecka, my, my, my reading - I can't tell you where this came from in this record. Maybe it was just an imagination or assumption on my part, was that those cite specific velocities were already published, and well known. And certainly, if they're not, they should be knowable within the 30 day deadline. And if they can't be, I

think we might have other problems. So I would, I would suggest we give them the opportunity to use their 30 days as they see fit, and either they - either they, they're able to provide that, or they're not, would be my recommendation, if that sounds all right.

COMMISSIONER JANECKA: Well said, and agreed.

CHAIR NIERMANN: Okay. Commissioner Lindley, additional thoughts, or comments, or questions?

COMMISSIONER LINDLEY: No. I, I would have seconded the motion. So --

CHAIR NIERMANN: Okay. So we have - we have a, a motion, and, and, and, and two seconds, which seems better than one. Let me take a vote. The motion has been made and seconded. Commissioner Lindley, how do you vote?

COMMISSIONER LINDLEY: Aye.

CHAIR NIERMANN: Commissioner Janecka, how do you vote?

COMMISSIONER JANECKA: Aye.

CHAIR NIERMANN: I also vote Aye. The motion carries. Ms. Smith, I'll ask you to return us to Old Business Number One, and call the caption, please.

(END OF SECTION)

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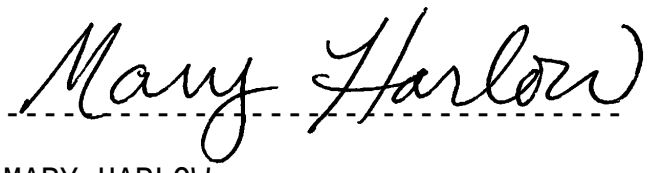

MARY HARLOW

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