#### SOAH DOCKET NO. 582-20-1895 TCEQ DOCKET NO. 2019-1156-IWD

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IN THE MATTER OF THE APPLICATION OF PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY FOR TPDES PERMIT NO. WQ0005253000

#### **BEFORE THE STATE OFFICE**

OF

**ADMINISTRATIVE HEARINGS** 

#### PORT OF CORPUS CHRISTI AUTHORITY'S <u>REPLY TO EXCEPTIONS ON REMAND</u>

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### **TABLE OF CONTENTS**

I.	INTF	RODUC	CTION		1		
П.	ARGUMENT						
	А.	The ALJs correctly determined that the Port Authority's evidence and testimony regarding the Draft Permit was within the scope of the Remand Order from the TCEQ.					
	В.	The ALJs correctly admitted the Administrative Record without objection from Protestants					
	C.	The TCEQ Commissioners correctly determined that the relevant standard was for no significant lethality in the ZID					
	D.	Any dispute between the EPA and TCEQ is outside the scope of the Remand Order.					
	E.	The Draft Permit on remand is not a major amendment 1					
	F.	The ALJs correctly excluded the hearsay testimony of Protestants' experts					
	G.	Whether the modeling complies with applicable regulations to ensure the Draft Permit is protective of Water Quality, Utilizing Accurate Inputs					
		1.	The l	PFD Analysis of the Modeling Issues	14		
		2.	Dept	h of the Channel Input	15		
		3.	Dista	nce to the Shore Input	16		
		4.	The l	Location of the Outfall	19		
		5.	Amb	ient Velocity and the Absence of an Eddy	20		
		6.	Othe	r Modeling Issues Addressed by Protestants' Exceptions	21		
	H.	Whether the TCEQ's antidegradation review was accurate					
		1. Weight of the evidence.					
		2.	Regulatory definitions				
		3.	Salt	flux calculation.	27		
			a.	Protestants did not raise the salt-flux calculation issue during trial.	27		
			b.	The ALJs should reject this argument even if it had not been waived because the evidence shows that the desalination facility would contribute less than 1% of the daily salt mass through the area of the channel of the diffuser.	28		

	I.	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. (Issue A)
	J.	Whether the proposed discharge will adversely impact recreational activities, commercial fishing, or fisheries in Corpus Christi Bay and the Ship Channel. (Issue C)
	К.	Whether the Application and representations contained therein are complete and accurate. (Issue D)
	L.	Whether the Draft Permit includes all appropriate and necessary requirements. (Issue I)
	М.	Audubon Texas has raised no legitimate issues to the PFD or Draft Permit
	N.	TCEQ Exceptions to the PFD on Remand
III.	CON	CLUSION AND PRAYER

#### LIST OF DEFINITIONS, ABBREVIATIONS AND ACRONYMS

- 1. "ADCP" means Acoustic Doppler Current Profiler.
- 2. "ALJs" means Administrative Law Judges.
- 3. "Application" means the Port of Corpus Christi Authority of Nueces County's application for TPDES Permit No. WQ0005253000.
- 4. "Aransas Channel" means the Aransas Channel identified on Figure 1 below.
- 5. "Aransas Pass" means the Aransas Pass identified on Figure 1 below.
- 6. "ASCE" means American Society of Civil Engineers.
- 7. "CCH" means the Contested Case Hearing.
- 8. "CCSC" means the Corpus Christi Ship Channel.
- 9. "CWA" means the Federal Clean Water Act.
- 10. "Diffuser" means the multi-port diffuser designed by Dr. Lial Tischler and described in Dr. Tischler's memo of June 24, 2021, in the Revised Application.
- 11. "Effluent" means the water identified in the Draft Permit with the outflow from the Facility to be discharged into the CCSC pursuant to the terms of the Draft Permit.
- 12. "EPA" means Environmental Protection Agency.
- 13. "Executive Director" or "ED" means the Executive Director of the TCEQ.
- 14. "Facility" means the desalination facility proposed in the Revised Application.
- 15. "Harbor Island" means Harbor Island identified on Figure 1 below.
- 16. "HHMZ" means Human Health Mixing Zone.
- 17. "LOEC" means Lowest Observed Effect Concentration.
- 18. "Lydia Ann Channel" means the Lydia Ann Channel identified on Figure 1 below.
- 19. "MGD" means Million Gallons Per Day.
- 20. "MZ" means Mixing Zone also referred to as the Aquatic Life Mixing Zone.
- 21. "NOAA" means National Oceanic and Atmospheric Association.
- 22. "NOEC" means No Observed Effect Concentration.

- 23. "Outfall" or "Outfall 001" means the location of the effluent discharge identified in the Revised Application and identified on Figure 1 below.
- 24. "PAC" means Port Aransas Conservancy.
- 25. "Permit" or "Draft Permit" means the version of TPDES Permit No. WQ0005253000 submitted by the TCEQ Executive Director in September 2021.
- 26. "Port Authority" means the Port of Corpus Christi Authority of Nueces County, Texas.
- 27. "PPT" means Parts Per Thousand.
- 28. "Prior Draft Permit" means the version of TPDES Permit No. WQ0005253000 submitted by the TCEQ Executive Director in 2020 prior to the Remand Order.
- 29. "Protestants" means all the individuals or organizations that are parties to the Contested Case Hearing opposing the Draft Permit.
- 30. "Remand Order" means the Order from the Texas Commission on Environmental Quality dated May 26, 2021.
- 31. "Revised Application" means the revision of June 24, 2021, to the Port of Corpus Christi Authority of Nueces County's Application for TPDES Permit No. WQ0005253000 and associated documents.
- 32. "SOAH" means State Office of Administrative Hearings.
- 33. "SWQS" means Texas Surface Water Quality Standards.
- 34. "TBELs" means Technology-Based Effluent Limits.
- 35. "TCEQ" means Texas Commission on Environmental Quality.
- 36. "TPDES" means Texas Pollution Discharge Elimination System.
- 37. "WQBELs" means Water Quality-Based Effluent Limits.
- 38. "ZID" means Zone of Initial Dilution.
- 39. "40 C.F.R." means Code of Federal Regulations Title 40.
- 40. "30 T.A.C." means Texas Administrative Code Title 30.

#### PORT OF CORPUS CHRISTI AUTHORITY'S REPLY TO EXCEPTIONS ON REMAND

#### I. INTRODUCTION

On June 20, 2022, the ALJs issued over 120 pages of the Proposal for Decision ("PFD"). Findings of Fact and Conclusions of Law reviewing and analyzing hundreds of pages of pre-filed direct testimony and testimony from witnesses during the hearing, dozens of exhibits containing thousands of pages, and the parties' extensive closing arguments. The PFD considered and synthesized the testimony from 23 witnesses who offered testimony at the hearing and set forth the analysis and reasons for the decision in the PFD. Protestants provide nothing in their Exceptions,<sup>1</sup> that requires the ALJs to revise or amend the PFD, and certainly provide nothing that would alter in any way the recommendation that the Draft Permit be issued.

Protestants' arguments revisit issues that the ALJs resolved years ago, before the hearing on remand, including: a regurgitation of the proceedings before and during the original hearing; a request that the ALJs arbitrate tangential disputes between the TCEQ and EPA; and a repudiation of the same salinity standard that they championed in April. Protestants identify no new evidence previously considered, and already rejected. not no new arguments not Repetition of a flawed argument does not make it right, nor can an acidic tone remedy the absence of credible evidence.

<sup>&</sup>lt;sup>1</sup> Specifically, the Protestants filed the following documents on July 11, 2022, all of which will be referred to in the aggregate as "Exceptions" unless otherwise noted: (i) Exceptions to the Proposal for Decision of James King, Tammy King, Sam Steves and Edward Steves ("Kings' and Steves' Exceptions"); (ii) Executive Director's Exceptions to the Proposal for Decision on Remand ("ED's Exceptions"); (iii) Audubon Texas' Exceptions to the Proposal for Decision in the Above Matter ("Audubon's Exceptions"); and (iv) Port Aransas Conservancy's Exceptions to Proposal for Decision on Remand ("PAC's Exceptions to PFD").

The Port Authority accepts the PFD and the additional requirements recommended by the

ALJs for the Draft Permit. As set forth in more detail below, the ALJs should deny Protestants'

Exceptions for the following reasons:

- 1. **Scope of Remand.** The ALJs correctly followed the scope of the Remand Order. The Remand Order expressly stated that the Port Authority would be permitted to provide revised information, including that which related to the depth of the channel, the depth of the diffuser, and site-specific ambient velocity. The Remand Order, therefore, allowed *and anticipated* revisions to the Application, all of which were set out in the Revised Application.
- 2. **EPA and TCEQ Disputes Outside of the Scope of the Remand Order.** In the PFD, the ALJs correctly held that disputes between the EPA and the TCEQ over whether the Facility is properly classified as a major or minor facility are outside the scope of the Remand Order.
- 3. Admission of Administrative Record. The ALJs correctly admitted the Revised Application into the Administrative Record -- without any objection from Protestants. Protestants waived any objection to admission of the Revised Application into the Administrative Record because they did not object when the Revised Application was offered or admitted. Even if Protestants had not waived this issue, the ALJs' admission of the Revised Application was still correct because the statute Protestants rely on—Texas Water Code § 2003.047—simply does not support their argument that an amended application must have a sponsoring witness.
- 4. **Port Authority's Modeling Complied with Applicable Rules.** The ALJs performed a detailed and thorough analysis of the extensive testimony and voluminous exhibits regarding and reflecting the modeling performed by expert witnesses for the Executive Director, the Applicant and Protestants. The ALJs' findings that the CORMIX model requires schematization, that the inputs used by the Port Authority and the Executive Director were appropriate, that the Applicant's modeling met the regulatory requirements and that the Applicant's modeling, when combined with a limit on salinity, ensures that the Draft Permit is protective of water quality, were the logical and correct result of this analysis.
- 5. **Draft Permit Will Not Harm Marine Life or the Environment.** Protestants devote relatively little briefing in the Exceptions to the alleged harm to marine life and/or the environment an issue that occupied a significant portion of the testimony and evidence offered by Protestants in this matter. PAC's arguments that the WET testing is insufficient was incorrect and failed to account for the other requirements of the Draft Permit. Protestants' arguments based upon the Thomas paper do not refute the PFD's accurate analysis of the limitations of the Thomas paper, and Protestants' claims regarding the insufficiency of the 2 ppt per 100

meters are refuted by their own briefing and by the testimony of their own expert witness.

- 6. **Draft Permit Will Not Harm Marine Life or the Environment.** Protestants devote relatively little briefing in the Exceptions to this issue that occupied the bulk of the testimony and evidence they offered in this matter. PAC's arguments that the WET testing is insufficient are incorrect and fail to account for the other requirements of the Draft Permit. Protestants' arguments based upon the Thomas paper do not refute the PFD's accurate analysis of the limitations of that study, and Protestants' claims regarding the insufficiency of the 2 ppt per 100 meters are refuted by their own briefing and the testimony of their own expert witness.
- 7. Antidegradation Review was Correct. The ALJs correctly determined that the Executive Director's antidegradation review was accurate and performed in accordance with TCEQ rules and regulations. The testimony from Peter Schaefer—Leader of the Standards Implementation Team of the Water Quality Assessment Section of TCEQ's Water Quality Division and the Port Authority's expert witness, Dr. Lial Tischler, supports the ALJs' conclusion that the Executive Director correctly performed the weight of the evidence analysis. The evidence from Mr. Schaefer and Dr. Tischler also supports the ALJs' conclusion that the Executive Director applied the correct analysis regarding de minimis and salinity gradient issues.

For these reasons, the Port Authority requests that the ALJs reject the arguments advanced by

Protestants in their Exceptions and recommend the issuance of the Draft Permit.

#### II. ARGUMENT

A. The ALJs correctly determined that the Port Authority's evidence and testimony regarding the Draft Permit was within the scope of the Remand Order from the TCEQ.

PAC contends that the Port Authority, ED, and the ALJs ignored the scope of the remand

set out in the Remand Order.<sup>2</sup> This order, issued May 26, 2021,<sup>3</sup> remands this matter to SOAH

for a number of reasons, specifically holding that the Port Authority is allowed to provide revised

<sup>&</sup>lt;sup>2</sup> PAC's Exceptions to PFD at 3-6.

<sup>&</sup>lt;sup>3</sup> Interim Remand Order.

information—*including* the depth of the channel, site-specific ambient velocity, and the depth of the diffuser:

- II. A 30-day deadline is SET 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;
- III. The parties are allowed 30 days to review the revised information before setting a preliminary hearing;

The Commission did not restrict the "revised information" to the three listed items as Protestants claim -- it simply identified these items as illustrative examples. Moreover, the Commission anticipated that revised information *would be* provided by the Port Authority and allowed 30 days after such information was provided before a preliminary hearing would be set. It is abundantly clear that the Commission allowed and anticipated revisions to the Application.

PAC's description of the Remand Order in its Exceptions to the PFD is nothing if not misleading.<sup>4</sup> PAC's description of the Remand Order outlines the new legal standard the ALJs were instructed to follow and the issues on which the ALJs were to take additional evidence, but then artificially confines the scope of the information the Port Authority was permitted to revise, incorrectly suggesting that it was strictly limited to the "depth of the channel, site-specific ambient velocity, and the depth of the diffuser." In fact, the Remand Order separately allows the Port Authority to provide any and all of its "revised information" to all parties, and nowhere does it limit this "revised information" as Protestants contend.

<sup>&</sup>lt;sup>4</sup> PAC's Exceptions to PFD on Remand at 3.

PAC complains that at the open meeting of the TCEQ, the Port Authority represented that the diffuser would be placed at a deeper location, but then later, and surreptitiously, moved the diffuser to a shallower location.<sup>5</sup> But the Remand Order does not *mandate* that the diffuser be moved to a deeper location—only that that the Port Authority provide revised information as to its depth.<sup>6</sup> The ultimate goal, as stated by the Port Authority's representative at the hearing, was to "provide more protection for Marine life and the environment"<sup>7</sup>—a goal met on remand by the Port Authority.

Significantly, this issue has already been raised and addressed by the ALJs in their ruling on PAC's Motion to Certify Questions to the TCEQ in July 2021. PAC argued then that the Port Authority's new proposed discharge location and new diffuser design were outside the scope of the Remand Order.<sup>8</sup> The Port Authority responded that the Remand Order authorized the Port Authority to supply the very information it provided, but that the basic parameters of the project remained the same.<sup>9</sup> The ALJs agreed with the Port Authority, stating the scope of the remand is "not as limited as PAC contends."<sup>10</sup> The ALJs also denied the relief requested by PAC, explaining that "many of the concerns PAC raises regarding the timing of this proceeding are addressed by the parties' agreed request to extend the ED's technical review, which was granted, and the parties' supplementation of discovery from the underlying proceeding."<sup>11</sup>

<sup>&</sup>lt;sup>5</sup> PAC's Exceptions to PFD at 5.

<sup>&</sup>lt;sup>6</sup> Remand Order at 2.

<sup>&</sup>lt;sup>7</sup> PAC's Exceptions to PFD at 5.

<sup>&</sup>lt;sup>8</sup> PAC Motion to Certify Questions at 10-11.

<sup>&</sup>lt;sup>9</sup> Port Authority Response to PAC Motion to Certify Questions at 9-10.

<sup>&</sup>lt;sup>10</sup> Order No. 13 at 2.

<sup>&</sup>lt;sup>11</sup> Order No. 13 at 2.

Accordingly, the proceeding on remand did not exceed the intended scope, and Protestants' arguments on this issue have already been rejected and do not justify or require revisions to the PFD, the Findings of Fact, or Conclusions of Law.

# B. The ALJs correctly admitted the Administrative Record without objection from Protestants.

The Kings and Steves argue that the ALJs erred by admitting the Revised Application into the record with no sponsor. This argument is simply not supported by the only authority cited by the Kings and Steves.<sup>12</sup> More importantly, Protestants waived this argument by failing to assert it at the time the Administrative Record was offered and admitted into evidence.

The Kings and Steves imply that "SB 709," which is now codified in Tex. Water Code § 2003.047, supports their argument that a sponsoring witness was required for the proper admission of the Revised Application. In fact, § 2003.047 provides simply that the filing of the administrative record (which would include the application) establishes a prima facie demonstration that the draft permit meets all state and federal legal and technical requirements, and would protect human health and safety, the environment, and physical property.<sup>13</sup> The Kings and Steves assert that SB 709 provides "special treatment" for the original application, but that this same "special treatment" is not available to an amended application and the Port Authority was therefore required to admit the Revised Application through a sponsoring witness.<sup>14</sup> SB 709, however, simply does not require a sponsoring witness. The Kings and Steves fail to provide any other authority for this argument.

<sup>&</sup>lt;sup>12</sup> Kings and Steves cite only to "SB 709."

<sup>&</sup>lt;sup>13</sup> Tex. Water Code § 2003.047(i-1).

<sup>&</sup>lt;sup>14</sup> Kings and Steves' Exceptions at pp. 11-12.

Regardless, no objection was made by the Protestants as to the admission of the Revised Application or the Administrative Record at, or at any time before, the prehearing conference of March 11, 2022. Any objection concerning the admission of the Revised Application, or the Administrative Record, is therefore waived.<sup>15</sup> The Executive Director requested that it be allowed to replace certain redlined exhibits attached to the Revised Permit (Tabs K and L), but did not object to its admission. Accordingly, the ALJs admitted the Administrative Record, including the Revised Application, into evidence.<sup>16</sup> Set out below is the entire discussion concerning the admission of the Administrative Record at the March 2022 prehearing conference, which conclusively demonstrates that Protestants failed to raise any objection at that time, and have therefore waived their ability to do so now:

<sup>&</sup>lt;sup>15</sup> *Tex. Dep't of Pub. Safety v. Caruana*, 363 S.W.3d 558, 560 (Tex. 2012) ("Under the Administrative Procedure Act and SOAH rules, [administrative] proceedings are governed by 'the rules of evidence as applied in a non-jury civil case in a district court of this state.") (quoting TEX. GOV'T CODE § 2001.081); TEX. R. EVID. 103(a) ("A party may claim error in a ruling to admit or exclude evidence only if the error affects a substantial right of the party and: (1) if the ruling admits evidence, a party, on the record: (A) timely objects or moves to strike ....").

<sup>&</sup>lt;sup>16</sup> March 11, 2022 Transcript at pp 9-10.

7	JUDGE QUINN: So the the remaining
8	objections are overruled.
9	The only other pending motion that we
10	have that I saw was the executive director's motion to
11	admit Tab K and Tab L to the administrative record.
12	Are there any objections to that?
13	MR. BENNETT: Your Honor, if I could
14	clarify one thing, maybe hear from Ms. Humphreys. It
15	is my understanding that the correction or the filing
16	was made simply to correct a red-lined version of
17	changes to the draft permit and then there had been an
18	incorrect document included, and it was just replacing
19	that document. If Ms. Humphreys can clarify whether
20	there were any other changes made in the what was
21	submitted, that would be helpful.
22	MS. HUMPHREYS: Mr. Bennett, you're
23	correct. The draft permit that was submitted is the
24	correct version of the draft permit. The draft permit
25	that was originally submitted in the administrative

record was the incorrect version. The statement of 1 2 basis that was submitted, the administrative record 3 only had a red line, and the new tab has the clean 4 copy. 5 MR. BENNETT: Okay. Thank you very 6 much. No objections from PAC. 7 JUDGE QUINN: All right. And I'm not 8 hearing any other objections so those documents will 9 be admitted. For consistency with the numbering of 10 the other administrative record exhibits, we'll admit 11 those as AR-R6, which will be Tab K, and AR-R7, which 12 will be Tab L. 13 MS. HUMPHREYS: Thank you. 14 JUDGE QUINN: All right. Moving down 15 the agenda, we did receive the parties' joint status

Protestants provide no authority that would permit the ALJs to revisit Protestants' waived objection to the admission of the Administrative Record on remand.

C. The TCEQ Commissioners correctly determined that the relevant standard was for "no significant lethality" in the ZID.

PAC repeats its argument that the correct standard for determining whether the Outfall will have an adverse effect on organisms traveling through the ZID should be the "no lethality" standard set out in 30 TAC §§ 307.6(e)(1) and 307.8(b)(2). As the ALJs noted in the PFD, the Commission rejected this argument and determined that "the ALJs should apply the standard set out in 30 TAC §307.6(e)(1), which states that 'there must be no *significant* lethality to aquatic organisms that move through a ZID."<sup>17</sup> The Commission has resolved the issue of what standard should apply in the Remand Order.<sup>18</sup> The ALJs applied 30 TAC § 307.6(e)(1) throughout the PFD in ruling on the issues on Remand, and Protestants have offered no reason for them to change the PFD.

#### D. Any dispute between the EPA and TCEQ is outside the scope of the Remand Order.

The EPA and the TCEQ dispute whether the Facility is properly classified as a major or minor facility.<sup>19</sup> In the PFD, the ALJs held that "disputes between EPA and TCEQ over whether the Facility is properly classified as a major or minor facility are outside the scope of the issues the Commissioners remanded."<sup>20</sup> The ALJs are correct.

Protestants argue that the ALJs are incorrect and that they should have considered the major/minor facility issue.<sup>21</sup> Protestants contend that EPA has "told TCEQ that going forward <u>all</u> desalination facilities should be classified as Major facilities."<sup>22</sup>

<sup>&</sup>lt;sup>17</sup> PFD at 9. (emphasis in original)

<sup>&</sup>lt;sup>18</sup> Tex. Gov't Code § 2001.058(e); *Tex. State Bd. of Pub. Accountancy v. Bass*, 366 S.W.3d 751, 756 (Tex. App.—Austin 2012, no pet.).

<sup>&</sup>lt;sup>19</sup> PFD at 12-13.

<sup>&</sup>lt;sup>20</sup> PFD at 13.

<sup>&</sup>lt;sup>21</sup> PAC Exceptions at 7-10.

<sup>&</sup>lt;sup>22</sup> PAC Exceptions at 9.

But as the Executive Director explained in its closing argument—and as the ALJs recognized in their PFD on remand—the dispute between the EPA and TCEQ regarding this issue is not an issue before the ALJs on remand. The Commission did not remand the question concerning the interplay between state and federal law on the classification of permits. The ALJs should not alter their correct determination in the PFD that the EPA/TCEQ dispute over major/minor facilities is not an issue in this remand proceeding.

#### E. The Draft Permit on remand is not a major amendment.

The ALJs previously ruled that the Port Authority's Revised Application did not constitute a major amendment requiring a new notice and comment period.<sup>23</sup> The ALJs denied PAC's July 9, 2021, motion to certify the question on the scope of the remand.<sup>24</sup> Again, this is another effort by the Protestants to relitigate an issue decided more than one year ago.<sup>25</sup> The ALJs' decision rejecting Protestants' arguments is correct.

Protestants claim that three changes in the Port Authority's amended application involving change in the location of the discharge and the diffuser design make it a major amendment needing new notice and comment, as opposed to changes that could be addressed in the remand.<sup>26</sup> But as the ALJs have previously held, none of these qualify as a major amendment. Protestants cite to only one case in support of their argument that the Port Authority's amended application was a major amendment needing new notice and comment: The Texas Supreme Court's opinion in *TCEQ v. City of Waco.*<sup>27</sup> But that case merely holds that major amendments can be addressed as

<sup>&</sup>lt;sup>23</sup> ALJ Order No. 13 (August 19, 2021).

<sup>&</sup>lt;sup>24</sup> ALJ Order No. 13 (August 19, 2021).

<sup>&</sup>lt;sup>25</sup> Kings' & Steves' Exceptions at 6-11.

<sup>&</sup>lt;sup>26</sup> Kings' & Steves' Exceptions at 9.

<sup>&</sup>lt;sup>27</sup> TCEQ v. City of Waco, 413 S.W.3d 409 (Tex. 2013); Kings' and Steves' Exceptions at 8.

minor amendments under certain circumstances.<sup>28</sup> It does not support their argument that the changes in this case would qualify as a major amendment. Protestants, therefore, have no authority for their claim this was a major amendment needing new notice and comment.

In their remand order, the Commissioners instructed the Port Authority to "provide revised information to all parties including the depth of the channel, site-specific ambient velocity, and the depth of the diffuser...."<sup>29</sup> The Port Authority complied with that order. As the Executive Director recognized—without objection from PAC—meeting those requirements requires revising the original application. The Port Authority, therefore, complied with the Order when it provided the revised application. The Order specifically directs the Port Authority to provide "revised information" including the updated depth of the diffuser, the ambient velocity and the depth of the channel — this is exactly what the Port Authority did.

As one example of the testimony refuting Protestants' contentions, PAC witness Bruce Wiland admitted that minor changes to the location of the discharge would not require new notice.<sup>30</sup> Mr. Wiland admitted that a move slightly toward the center of the channel would not impact the permit's notice requirements.<sup>31</sup> The Commission recognized that there could be changes to the diffuser design and other issues on remand, but it did not order that the amended application would be a major amendment. The ALJs, therefore, properly rejected Protestant's argument that the Port Authority's amended application was a major amendment requiring new notice and comment.

<sup>&</sup>lt;sup>28</sup> City of Waco, 413 S.W.3d at 419.

<sup>&</sup>lt;sup>29</sup> Exhibit AR-R 2 at 2.

<sup>&</sup>lt;sup>30</sup> Tr. Vol 7 at 1622-1623.

<sup>&</sup>lt;sup>31</sup> Tr. Vol 7 at 1622-1623.

#### F. The ALJs correctly excluded the hearsay testimony of Protestants' experts.

Protestants Kings and Steves assert that the hearsay conversations between Dr. Scott Socolofsky and Tim Osting and Dr. Robert Doneker, who was not designated as an expert and did not testify, should not have been excluded by the ALJs. They cite to no authority to support this argument. Regardless, they are incorrect.

A trial court's (or here, the ALJs') ruling on the admissions of testimony will be upheld if there is a basis for the ruling. Evidentiary rulings to admit or exclude evidence are reviewed under the abuse of discretion standard.<sup>32</sup> An abuse of discretion occurs when the trial court acts arbitrarily or without reference to any guiding rules and principles,<sup>33</sup> and the ruling must be upheld if there is any legitimate basis for the ruling.<sup>34</sup> Here there was clearly a legitimate basis for excluding the testimony. Expert witnesses are not allowed to bolster their opinions by relying on out-of-court statements by non-designated expert witnesses or parrot the opinions of undesignated experts.<sup>35</sup> Allowing such testimony would contradict the Port Authority's right to cross-examine and impeach the source of the hearsay.<sup>36</sup>

Moreover, a trial court's evidentiary ruling will be set aside only if the "erroneous evidentiary ruling probably caused the rendition of an improper judgment."<sup>37</sup>

<sup>&</sup>lt;sup>32</sup> Seim v. Allstate Tex. Lloyds, 551 S.W.3d 161, 163 (Tex. 2018).

<sup>&</sup>lt;sup>33</sup>*City of Jacksboro v. Two Bush Cmty. Action Group*, No. 03-10-00860-CV, 2012 WL 2509804, at \*22 (Tex. App.— Austin June 28, 2012, pet. denied) ("We review an ALJ's rulings on the admission or exclusion of evidence under the same abuse-of-discretion standard we apply to trial courts."); *City of Amarillo v. R.R. Comm'n of Tex.*, 894 S.W.2d 491, 495 (Tex. App.—Austin 1995, writ denied) ("We therefore review an agency's rulings on the admission or exclusion of evidence under the abuse of discretion standard we apply to trial courts.")

<sup>&</sup>lt;sup>34</sup> Owens-Corning Fiberglas Corp. v. Malone, 972 S.W.2d 35, 43 (Tex. 1998); Simien, 321 S.W.3d at 239.

<sup>&</sup>lt;sup>35</sup> Southland Lloyds Inc. Co. v. Cantu, 399 S.W.3d 558 (Tex. App.—San Antonio 2011, pet. denied).

<sup>&</sup>lt;sup>36</sup> See, e.g., Davidson v. Great National Life Insurance Co., 737 S.W.2d 312, 314 (Tex. 1987) (holding that crossexamination is a safeguard essential to a fair trial and a cornerstone in the quest for truth; "Due process requires an opportunity to confront and cross-examine adverse witnesses.").

<sup>&</sup>lt;sup>37</sup> Horizon/CMS Healthcare Corp. v. Auld, 34 S.W.3d 887, 906 (Tex. 2000); see Tex. R. App. P. 44.1(a)(1).

Significantly, the Kings and Steves do not allege the exclusion of this evidence caused the rendition of an improper judgment; they argue only that this exclusion was a "significant error."<sup>38</sup>

The Port Authority timely objected to these out-of-court conversations as hearsay. Protestants' attempt to insert the testimony of an undesignated, non-retained expert was not sanctioned by the evidentiary rules and was appropriately excluded.

## G. Whether the modeling complies with applicable regulations to ensure the Draft Permit is protective of Water Quality, Utilizing Accurate Inputs.

The Proposal for Decision on Remand correctly found that the modeling performed by the Port Authority and the Executive Director in connection with the revised application on remand complied with the applicable regulations, that the inputs were within the range of reasonable values and not materially inaccurate and when combined with a recommended salinity limit of 2 ppt above ambient at 100 meters, ensured that the Draft Permit was protective and utilized accurate inputs.<sup>39</sup> PAC starts its discussion of the modeling, not by discussing the June 20, 2022 Proposal for Decision on Remand ("PFD") or the 10-day hearing that was conducted from March 14 - 25, 2022 on which the PFD is based, but by discussing supposed procedural errors and rehashing what earlier versions of the Application and Draft Permit said, or did not say.<sup>40</sup> Because the prior modeling is not at issue on remand, the Port Authority will not address these arguments point by point, but will address PAC's false statements regarding Dr. Lial Tischler.

It is true that Dr. Tischler's modeling plays an important role in the revised application. But PAC's claims that (1) Dr. Tischler created the original diffuser design and "endorsed the limit of 2.5% at the edge of the ZID" or (2) that he "only admitted that the Port could not satisfy a limit

<sup>&</sup>lt;sup>38</sup> Kings' and Steves' Exceptions on Remand at 15.

<sup>&</sup>lt;sup>39</sup> PFD at 40, 104.

<sup>&</sup>lt;sup>40</sup> PAC's Exceptions to PFD at 10 - 11.

of 18.4% when subjected to vigorous and skillful cross examination at the initial hearing" are both untrue.<sup>41</sup> Dr. Tischler did not design the original diffuser, he did not endorse or have anything to do with the original application or the modeling associated with it. Dr. Tischler was also candid, when asked, about what the modeling demonstrated under certain ambient tidal velocities. Dr. Tischler's testimony about the original design not meeting the permit limits did not occur until the end of his testimony because he was not asked whether the original design would have a problem meeting the permit limits until being cross-examined a second time by counsel for OPIC, who was the last counsel to conduct cross-examination.<sup>42</sup>

#### 1. The PFD Analysis of the Modeling Issues

PAC criticizes the ALJs findings on the accuracy of the inputs for the modeling as being the result of "process fatigue" and rationalization.<sup>43</sup> But far from showing process fatigue, the PFD reviews the arguments and evidence presented by all parties and explains in detail the findings that the inputs were accurate, and the modeling was protective.<sup>44</sup> As explained in the PFD, the issues related to the inputs for the CORMIX modeling are related to the fact that the model requires schematization.<sup>45</sup> The arguments made by PAC and the Kings and Steves largely ignore this, despite the fact that all four of the modeling witnesses who performed CORMIX modeling on remand testified (Dr. Tischler for the Applicant, Ms. Cunningham for the Executive Director, and Dr. Socolofsky and Mr. Osting for Protestants) all agree that the CORMIX modeling inputs require schematization.<sup>46</sup> After reviewing the testimony by the multitude of witnesses and the scores of

<sup>&</sup>lt;sup>41</sup> PAC Exceptions to PFD at 11 and n. 31.

<sup>&</sup>lt;sup>42</sup> Nov. 5, 2020 Tr. at 264:13-24.

<sup>&</sup>lt;sup>43</sup> PAC Exceptions to PFD at 11.

<sup>&</sup>lt;sup>44</sup> See PFD at 16-40.

<sup>&</sup>lt;sup>45</sup> PFD at 15.

<sup>&</sup>lt;sup>46</sup> APP-LT-1-R at 22-23; ED-KC-1 Remand at 30; PAC-49R at 20-22; PAC-51R at 22-24.

modeling runs, the PFD correctly acknowledges that because of the need for schematization, many of the inputs such as the depth of the channel, the distance from the shore and the ambient velocity do not have just one "correct" number, but in fact have a range of correct values.<sup>47</sup>

#### 2. Depth of the Channel Input

In their Exceptions, PAC and the Kings and Steves repeat the claim from their Closing Arguments that there is only one correct input value for the depth of the channel.<sup>48</sup> PAC and the Kings and Steves argue that the use of 90 feet as the depth of the channel for the output is incorrect because the channel is not 90 feet directly below the diffuser ports.<sup>49</sup> But this claim that the only correct input is the depth directly below the diffuser jets is in direct conflict with the testimony of their own witness, Dr. Socolofsky. Dr. Socolofsky testified that (1) he also used 90 feet for some of his modeling runs, (2) he used shallower depths *matching the average depth* (not the specific depth at the diffuser ports) for some of his modeling runs, and (3) that he did not criticize modeling runs using the 90-foot depth.<sup>50</sup> Protestants' arguments also ignore the fact that Mr. Osting's CORMIX simulations also used 90 feet as the depth at the diffuser. But perhaps the most revealing, when it comes to the fact that a range of depths is acceptable for CORMIX modeling purposes, is the fact accurately acknowledged by the PFD, that the results of the CORMIX modeling showed no significant difference using any of the modeled depths from 70 feet to 90

<sup>&</sup>lt;sup>47</sup> PFD at 36.

<sup>&</sup>lt;sup>48</sup> PAC Exceptions to PFD at 11-12; Kings' and Steves' Exceptions to PFD at 16-18. The Kings and Steves do not address the depth of the channel in their discussion of the modeling inputs (Issue G) but instead discuss this issue and other modeling related inputs in the discussion of whether the application and representations contained therein are complete and accurate (Issue D). Because the PFD and the other parties address the channel depth and other modeling related issues in relationship to the modeling, the Port Authority will address the Kings' and Steves' arguments here as well.

<sup>&</sup>lt;sup>49</sup> *Id.* Contrary to the Kings' and Steves' assertion that Dr. Socolofsky's use of the 90-foot depth was only to match the runs by the ED and Port Authority, Dr. Socolofsky used the 90-foot depth for some of his runs testing different distances to the bank (APP-44R) and when he was simulating lower flow rates (APP-47-R Replacement, APP-48-R).

<sup>&</sup>lt;sup>50</sup> PAC-51-R Remand Prefiled Testimony of Scott Socolofsky at 40; see also APP-44R, APP-47-R Replacement, and APP-48-R for examples of Dr. Socolofsky's use of 90-foot depth.

feet.<sup>51</sup> Protestants' complaints on this issue are, therefore, irrelevant because the CORMIX modeling results do not change for modeling runs using depths from 70 feet to 90 feet. The ALJs correctly concluded that the 90-foot depth was a reasonable input and was not inaccurate.<sup>52</sup> Despite their arguments for depth of the channel being contrary to their own experts' testimony and despite the fact that the results of the modeling are no different, PAC and the Kings and Steves seek to have the permit denied based upon the depth input. The PFD is correct on the depth of the channel input and should not be changed.

#### **3. Distance to the Shore Input**

Similarly, the distance to the shore (DISTB) is another input for which the modeler must consider the schematization. While PAC's Exceptions make no mention of the DISTB for the CORMIX modeling, the Kings and Steves largely repeat the arguments they made in their closing on the subject. The Kings and Steves cite to the CORMIX manual's definition of DISTB and then ignore both the definition and the modeling to argue that the permit should be denied. The CORMIX manual clearly states two definitions for the distance to the shore input:

Distance from Shore (DISTB) - the average distance between the outfall location (or diffuser mid-point) and the shoreline. It is also specified as a cumulative ambient discharge divided by the product UA times HA.

The first definition "the average distance between the outfall location … and the shoreline" is simpler to apply, but as the ALJs point out, the definition does not specify how much of the shoreline should be considered in the averaging.<sup>53</sup> As the Executive Director's modeler testified, the shoreline is irregular,<sup>54</sup> and while Protestants are fixated on the areas of the shoreline which

<sup>&</sup>lt;sup>51</sup> PFD at 36; Ex. APP-51-R at 2 (compare SS\_Summer 50%\_95\_Salinity (0.8)\_35mFrom Bank with SS\_Summer 50%\_95\_Salinity (0.8)\_Shallow).

<sup>&</sup>lt;sup>52</sup> PFD at 36.

<sup>&</sup>lt;sup>53</sup> PFD at 37.

<sup>&</sup>lt;sup>54</sup> Tr. Vol. 9 at 2326.

are closer to the diffuser than 229 feet (approximately 70 meters), claiming that it is the "maximum" distance,<sup>55</sup> there are other areas where the shoreline is further from the diffuser than the 229 feet that the Port Authority and the Executive Director used.<sup>56</sup> And as the PFD correctly points out, even using the figures provided by Protestants, which do not include the areas of the shore further than 229 feet, in no case is the shore less than 36 meters from the diffuser, so even using the most conservative definition for the average distance to the shore, it is between 36 and 70 meters.<sup>57</sup> Another critical factor on which the PFD bases the determination that the use of 229 feet is reasonable for modeling purposes is the fact that the modeling by Dr. Socolofsky and Mr. Osting showed that for the DISTB input, distances from 229 feet (69.8 meters) down to 115 feet (35 meters) give essentially the same CORMIX results.<sup>58</sup>

Protestants ask that the permit be denied because they do not believe the modeling input used by the Port Authority and the Executive Director fit their interpretation of the manual's definition for how to calculate that input. But as the ALJs correctly stated in the PFD, under any method of determining the average distance to the shore, the results of the model are the same as when using the distance used by the Port Authority and the Executive Director.<sup>59</sup> Protestants' rambling discussion of why its experts could not calculate the DISTB using the secondary definition is nothing but a smokescreen. Protestants' experts did not use either of the definitions to make a determination of the appropriate DISTB, and in fact did not provide an opinion regarding

<sup>&</sup>lt;sup>55</sup> Kings' and Steves' Exceptions to PFD at 23.

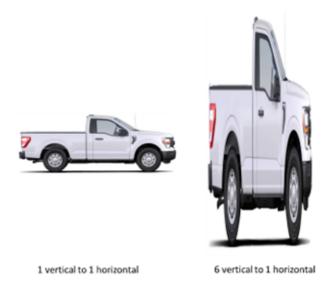
<sup>&</sup>lt;sup>56</sup> Tr. Vol. 9 at 2326-2327.

<sup>&</sup>lt;sup>57</sup> PFD at 38; Ex. PAC-49R TO-3; *see also* Port of Corpus Christi Authority's Reply to Protestants' Closing Argument on Remand at 37, n. 209.

<sup>&</sup>lt;sup>58</sup> PFD at 37. As Mr. Osting testified "[w]ith the bank more distant than 15 meters (49 feet), the plume exhibits similar percent effluent characteristics as the Executive Director simulation with the bank at 69.8 meters." PAC-49R at 15:13-14.

<sup>&</sup>lt;sup>59</sup>Id.

what distance or distances would be appropriate.<sup>60</sup> The Kings and Steves then spend pages rehashing various CORMIX runs by Dr. Socolofsky in which he used a distance of 15 meters or less to the shore for the DISTB.<sup>61</sup> And despite the deceptive graphics which Protestants continue to use to support the use of these unrealistically short distances to the shore, the PFD correctly rejected these CORMIX runs which utilized a distance to the shore which was less than 36 meters.<sup>62</sup>



Protestants provide no new arguments on the distance to the shore input and retelling their

arguments adds nothing to their validity.

 $<sup>^{60}</sup>$  While Dr. Socolofsky conducted sensitivity runs, he admits that he cannot say which predictions are correct. (Tr. Vol. 7 at 1661-1662) In fact, counsel for PAC admits that they were not looking for the answer. (Tr. Vol. 9 at 2287:23 – 2288:8).

<sup>&</sup>lt;sup>61</sup> See Kings' and Steves' Exceptions to PFD at 24-25. The effluent percentages for some of those runs are stated incorrectly, claiming for example that at 10 meters the effluent percentages were 55% at the ZID, 40% at the ALMZ and 24% at the HHMZ when the actual results were 20.6%, 12.9% and 6.2% respectively at the ZID, ALMZ and HHMZ (see PAC-51R SS-5). The Exceptions also claim that the results at 15, 20 and 45 feet, the model predicts 30%, 20% and 17% at the edge of the mixing zone. It is difficult to determine what results are being referenced because all the distances to the shore were measured in meters and while there were runs at 5 meters (16.4 feet) and 15 meters (49 feet), there were no runs at 6 meters (approximately 20 feet). However, because the PFD correctly rejected all of these runs for determining the effluent percentages, the Port Authority need not attempt to further decipher what the Kings' and Steves' Exceptions are attempting to convey.

<sup>&</sup>lt;sup>62</sup> PFD at 38; Ex. PAC-49R TO-3. For further discussion of this subject see the Port Authority's Closing Argument on Remand at 52-55. The illustration used by PAC and the Kings and Steves depicts the slope of the channel floor with the same level of distortion as the picture on the right below represents a pickup truck.

#### 4. The Location of the Outfall

In a variation on the theme of the distance to the shore input question, the Kings and Steves repeat arguments from their closing that the application is not accurate because the diffuser latitude and longitude is not accurate to within a few inches. They argue that using the latitude/longitude in the application, the diffuser ports would be located below the channel bottom and therefore to have the diffuser discharge at 64 feet, on 4 to 6 foot risers, the location would have to be moved.<sup>63</sup> These are all the same arguments raised before and that the ALJs rejected. The Port Authority has addressed these arguments at length in its April 22, 2022, Reply to Protestants' Closing Argument on Remand<sup>64</sup> and will not repeat that discussion in its entirety here. In short, as the evidence showed, based on the current bathymetry and as shown on Dr. Jones' illustration at the hearing, the location of the diffuser would need to move approximately 7-14 feet south in the 1200-footwide channel to properly locate the diffuser ports at the modeled distance below the surface.<sup>65</sup> As it was also noted at the hearing, as a practical matter, the exact location will need to be determined at the time of design and construction as is done with any new permit.<sup>66</sup> As discussed in relation to the DISTB, none of these minor changes makes a difference in the modeling.<sup>67</sup> But in an attempt to exaggerate the issue, Protestants now claim that "the Port could, and more likely will, move it to some other area of the channel, closer to the Gulf or to the Bay, locations for which there is no

<sup>&</sup>lt;sup>63</sup> Kings' and Steves' Exceptions to PFD at 18-19.

<sup>&</sup>lt;sup>64</sup> See Port of Corpus Christi Authority's Reply to Protestants' Closing Argument on Remand at 33-36.

<sup>&</sup>lt;sup>65</sup> Port of Corpus Christi Authority's Reply to Protestants' Closing Argument on Remand at 35-36.

<sup>&</sup>lt;sup>66</sup> Ex. APP-LT-1-R Rebuttal, 2-3.

<sup>&</sup>lt;sup>67</sup> See Distance to the Shore Input above.

site-specific information and no modeling."<sup>68</sup> Such a claim directly conflicts with the testimony on the subject and should be disregarded in its entirety.<sup>69</sup>

Protestants end their argument by misrepresenting the CORMIX modeling by their own experts' sensitivity analysis stating that in addition to the modeling varying the distance from the diffuser to the bank (shore), that it would "allow them to see how moving the outfall at different distances *above* the bank affects mixing."<sup>70</sup> The confusion with Protestants' argument stems largely from their attempt to define the "bank" as the sloping bottom of the channel.<sup>71</sup> The sensitivity analysis was conducted to determine if the modeling results differed by varying the distance of the diffuser to the shore (DISTB) not the distance *above* the channel bottom.<sup>72</sup> The issues related to the DISTB are discussed above in detail. The key finding in this regard being that a change of the location of the diffuser closer or further from the shore of 7-14 feet makes no difference to the CORMIX modeling and thus it does not render the modeling, or the application, inaccurate.

#### 5. Ambient Velocity and the Absence of an Eddy

In the original application the Port Authority and Executive Director modeled using only the SOPs' default ambient flow rate of 0.05 m/s. For the hearing on remand, modeling was performed at ambient velocities from 0.05 m/s to 1.5 m/s. Protestants do not challenge the finding in the PFD that the primary concern raised in the Initial Proceeding has been addressed through

<sup>&</sup>lt;sup>68</sup> Kings' and Steves' Exceptions to PFD at 19.

<sup>&</sup>lt;sup>69</sup> Port of Corpus Christi Authority's Reply to Protestants' Closing Argument on Remand at 35-36.

<sup>&</sup>lt;sup>70</sup> Kings' and Steves' Exceptions to PFD at 19.

<sup>&</sup>lt;sup>71</sup> The Kings and Steves proffered the following definition for bank: "Here, this is the downward extension of the bank at the shoreline of Harbor Island. It has been referred to as the bottom of the channel." On the other hand Merriam Webster defines a bank as: "The rising ground bordering a lake, river, or sea …. We lived along the banks of the Mississippi River."

<sup>&</sup>lt;sup>72</sup> See PAC 51R SS-5, lines 61-67, 89-93.

the Port Authority's collection of velocity data and the fact that the parties modeled several inputs for velocity.<sup>73</sup> Instead, Protestants continue to try and create an issue about an eddy despite the data demonstrating that there is no persistent eddy in the area of the discharge.<sup>74</sup> This is the same eddy that has been sufficiently elusive so that it can only be seen once in a grainy photograph from 1956. The Port Authority has fully responded to the same arguments and mischaracterizations regarding the discussions of an eddy in its post-hearing briefing and will not repeat those here.<sup>75</sup> The PFD correctly finds that there is no evidence of an eddy that would lessen the reliability of the CORMIX modeling results.<sup>76</sup>

#### 6. Other Modeling Issues Addressed by Protestants' Exceptions

As the PFD correctly notes, the arguments about the accuracy of the modeling generally pertain to the CORMIX rather than the SUNTANS modeling.<sup>77</sup> PAC discusses the SUNTANS modeling only in the context of the antidegradation review and to the extent necessary, the Port Authority will address those arguments in the context of Issue H below. The Kings' and Steves' Exceptions repeat the arguments from their post-hearing briefing regarding the SUNTANS modeling in their discussion of Issue D, but the rambling two-page narrative is without a single citation to the record, the PFD or the proposed Findings of Fact and Conclusions of Law. As such, it contains no exceptions to the PFD that warrant the ALJs reversing their decision or altering the

<sup>&</sup>lt;sup>73</sup> PFD at 38.

<sup>&</sup>lt;sup>74</sup> PAC Exceptions to PFD at 13-14, Kings' and Steves' Exceptions to PFD at 20-21.

<sup>&</sup>lt;sup>75</sup> Port Authority Closing Argument on Remand at 39-41; Port Authority Reply on Remand at 49.

<sup>&</sup>lt;sup>76</sup> PFD at 39.

<sup>&</sup>lt;sup>77</sup> PFD at 16.

Findings of Fact or Conclusions of Law.<sup>78</sup> The Port Authority has previously briefed these issues in its post-hearing briefing and will not repeat them here.<sup>79</sup>

PAC claims that the PFD fails to properly deal with the local bathymetry, critical conditions and the CORMIX margin of error.<sup>80</sup> To the contrary, the PFD analyzed in detail each of these issues and more than accounts for any alleged uncertainty created by these issues by recommending that a limit on salinity be added to the Draft Permit. First, Protestants claim that because CORMIX cannot exactly model the local bathymetry it adds uncertainty to the CORMIX results.<sup>81</sup> But in a natural environment, outside a perfectly rectangular channel, the CORMIX modeling always requires schematization, meaning that it cannot exactly model the local bathymetry. Yet TCEQ, EPA and a multitude of other states rely on CORMIX for regulatory decisions for permitting throughout the United States and it is accepted as the standard modeling for permitting. It is no different here.

The CORMIX margin of error is not unique to the modeling in this case. It exists for all CORMIX modeling, and for that matter all modeling has a margin of error.<sup>82</sup> All of the modeling experts agreed that CORMIX was a reliable model and none of the modeling experts testified that modeling margin of error had ever been considered in any permitting matter.<sup>83</sup>

Finally, Protestants claim that the ED's modeling did not consider the worst-case scenario for salinity. In support of this claim they note that the critical case for modeling purposes selected by the ED was in the winter and the resulting rise in salinity was not as high as during the summer

<sup>&</sup>lt;sup>78</sup> Kings' and Steves' Exceptions to PFD at 26-28.

<sup>&</sup>lt;sup>79</sup> See Port Authority's Closing on Remand at 19, 55-56.

<sup>&</sup>lt;sup>80</sup> PAC Exceptions at 14-15.

<sup>&</sup>lt;sup>81</sup> PAC Exceptions to PFD at 14-15.

<sup>&</sup>lt;sup>82</sup> PFD at 35.

<sup>&</sup>lt;sup>83</sup> PFD at 34.

95<sup>th</sup> percentile run.<sup>84</sup> Protestants continue to misrepresent the meaning of the "critical case" for modeling purposes. As was discussed numerous times by the TCEQ's modeler during the hearing process, the critical conditions for CORMIX modeling purposes is determined by the case with the poorest mixing. While the case with the poorest mixing was not the worst-case scenario for salinity, Protestants' suggestion that the worst-case scenario for salinity was not considered in the modeling is false. Both the ED and the Port Authority modeled the summer 95<sup>th</sup> percentile salinity case which shows the highest change of salinity over ambient and most of the testimony in the hearing was focused on that worst-case scenario. Protestants' claims are even more hollow considering that the effluent percentages at the ZID, ALMZ and HHMZ for the ED's critical case (14.6%, 8.9% and 5.4%) and those for the Summer 95th percentile salinity case (14.6%, 8.9% and 5.1%) differ only in that mixing for the worst-case scenario is slightly better at the HHMZ. In any case, the PFD recommends a salinity limit of 2 ppt above ambient at 100 meters as a check to ensure that the salinity level will not exceed a level that PAC and the Kings and Steves both requested as being protective of the aquatic environment.<sup>85</sup> As discussed further below, Protestants are now caught having to invent reasons why the salinity limit that they themselves have requested, is no longer good enough. In doing so, they degrade the credibility of their arguments.

#### H. Whether the TCEQ's antidegradation review was accurate.

The TCEQ Executive Director performed the antidegradation review performed in accordance with TCEQ rules and regulations, which are found at 30 TAC § 307.5.<sup>86</sup> The Executive

<sup>&</sup>lt;sup>84</sup> PAC Exceptions to PFD at 14.

<sup>&</sup>lt;sup>85</sup> See Kings' and Steves' Closing Argument on Remand at 12: PAC's Closing Argument on Remand at 64.

<sup>&</sup>lt;sup>86</sup> PFD at 42; Exhibit ED-PS-1 Remand at 9, 24.

Director performed Tier 1 and Tier 2 reviews.<sup>87</sup> After a thorough review of the evidence, the ALJs determined that the Executive Director's antidegradation review was accurate.<sup>88</sup>

Peter Schaefer is the Leader of the Standards Implementation Team of the Water Quality Assessment Section of TCEQ's Water Quality Division, which is the TCEQ section responsible for performing antidegradation reviews.<sup>89</sup> Mr. Schaefer testified that the antidegradation review was based on rigorous technical reviews by TCEQ staff members with specialized expertise and training.<sup>90</sup> Mr. Schaefer testified that the TCEQ's antidegradation review established that the Permit would not degrade the water in Corpus Christi Bay or the Ship Channel.<sup>91</sup>

Protestants claim that the ALJs are wrong and that the Executive Director's antidegradation review was not accurate.<sup>92</sup> Protestants contend the Executive Director's antidegradation review was inaccurate because Mr. Schafer—allegedly—(1) incorrectly conducted his "weight of the evidence" analysis; (2) was unable to define specific regulatory terms, such as "de minimis" and "salinity gradient"; and (3) relied in part on Dr. Furnans' "salt flux" calculation.

#### 1. Weight of the evidence

Protestants claim that Mr. Schaefer did not actually perform a weight of the evidence analysis, but just relied on the Port Authority and Executive Director's evidence, to the exclusion of Protestants' evidence.<sup>93</sup> The ALJs ruled in the PFD that Mr. Schaefer did not ignore Protestants'

<sup>&</sup>lt;sup>87</sup> PFD at 42; Exhibit ED-PS-1 Remand at 27-29.

<sup>&</sup>lt;sup>88</sup> PFD at 53.

<sup>&</sup>lt;sup>89</sup> Exhibit APP-LT-1-R at 36, 51.

<sup>&</sup>lt;sup>90</sup> Exhibit ED-PS-1 Remand at 5.

<sup>&</sup>lt;sup>91</sup> Exhibit ED-PS-1 Remand at 22.

<sup>&</sup>lt;sup>92</sup> PAC Exceptions at 15-21; Kings' and Steves' Exceptions at 28-37.

<sup>&</sup>lt;sup>93</sup> PAC Exceptions at 20-21; Kings' and Steves' Exceptions at 30-32.

evidence.<sup>94</sup> The ALJs correctly ruled that Mr. Schaefer considered Dr. Nielsen's study and Protestants' other evidence, including their CORMIX runs.<sup>95</sup> The ALJs correctly ruled that Mr. Schaefer acted within his discretion when he heavily discounted the outlier CORMIX runs, with the ALJs noting that Mr. Schaefer discounted those CORMIX runs, not "PAC's evidence altogether."<sup>96</sup>

Mr. Schaefer made clear at trial that his weight of the evidence review was not arbitrary. He considered information from all sources; however, after considering the data from Protestants he determined that it had limited to no value, with the exception of information from a TWDB study and Dr. Nielsen's bioassay information.<sup>97</sup> That was within his discretion and is also consistent with the ALJs' review of the evidence in this matter.

The Port Authority's expert Dr. Lial Tischler testified regarding the antidegradation review. He testified that the TCEQ's antidegradation review done on remand was even more thorough than that done before the first hearing.<sup>98</sup> He testified that in its remand antidegradation review, the "TCEQ more thoroughly evaluated the increases in salinity in the CCSC and Corpus Christi Bay resulting from the proposed discharge, taking into account the limited area affected by the ZID and mixing zone for the discharge and the fact that ambient (natural) salinity gradients in the receiving waters would be virtually unaffected by the proposed discharge."<sup>99</sup> Dr. Tischler agreed with Mr. Schaefer's testimony that the TCEQ antidegradation review was accurate and that it complied with

<sup>&</sup>lt;sup>94</sup> PFD at 48-49.

<sup>&</sup>lt;sup>95</sup> PFD at 48.

<sup>&</sup>lt;sup>96</sup> PFD at 48.

<sup>&</sup>lt;sup>97</sup> Tr. Remand 2360:25 to 2361:24.

<sup>&</sup>lt;sup>98</sup> Exhibit APP-LT-1-R at 39.

<sup>&</sup>lt;sup>99</sup> Exhibit APP-LT-1-R at 39.

the Tier 1 and Tier 2 antidegradation policies.<sup>100</sup> Protestants chose not to cross-examine Dr. Tischler at all.<sup>101</sup>

The ALJs should reject Protestants' exceptions regarding the weight of the evidence review.

#### 2. Regulatory definitions

Protestants argue that Mr. Schaefer was unable to define the specific regulatory terms de minimis and salinity gradient, so his testimony was insufficient.<sup>102</sup> The ALJs rejected that argument in the PFD.<sup>103</sup> The ALJs held that "although Mr. Schaefer testified that he could not provide 'a precise definition' of 'salinity gradient,' he knew what it is, and 'could give you a definition ... just from the head, so to speak."<sup>104</sup> The ALJs held that Mr. Schaefer testified how he determined de minimis—which is not defined by the Texas Water Code, TCEQ rules, or IPs— and how he determined salinity tolerance.<sup>105</sup> The ALJs, therefore, rejected Protestants' argument that Mr. Schaefer's testimony was not sufficient because he did not know specific definitions— especially since they were not defined under the relevant law.<sup>106</sup>

The ALJ's ruling is correct. Mr. Schaefer's testimony makes clear that he knows what de minimis and salinity degradation are and that he could properly apply those terms in the antidegradation review.<sup>107</sup>

<sup>&</sup>lt;sup>100</sup> Exhibit APP-LT-1-R at 50-51.

<sup>&</sup>lt;sup>101</sup> Tr. Remand 812-817.

<sup>&</sup>lt;sup>102</sup> PAC Exceptions at 16-18; Kings' and Steves' Exceptions at 32-35.

<sup>&</sup>lt;sup>103</sup> PFD at 46-47.

<sup>&</sup>lt;sup>104</sup> PFD at 46 (quoting Remand Tr. Vol. 9 at 2349).

<sup>&</sup>lt;sup>105</sup> PFD at 47.

<sup>&</sup>lt;sup>106</sup> PFD at 47.

<sup>&</sup>lt;sup>107</sup> TR. Remand at 2349:5-11.

#### 3. Salt flux calculation

In their reply brief after the trial, Protestants raised for the first time what they contended was an error in Dr. Furnans' salt-flux calculation, resulting in an error by a factor of ten.<sup>108</sup> The ALJs should reject this argument because it was not raised at trial, with Protestants waiting until their final reply brief to raise the issue.

#### a. Protestants did not raise the salt-flux calculation issue during trial.

Protestants did not cross-examine Dr. Furnans about that issue at trial or raise any issue regarding this during the trial.<sup>109</sup> They chose not to raise it in their briefing until their final reply brief, when neither the Port Authority nor the Executive Director would be able to respond prior to the issuance of the PFD.<sup>110</sup>

The ALJs noted in their PFD that it is unclear if this is even an error because Protestants did not raise the issue during the trial and did not question Dr. Furnans or any other witness about it. Because of Protestants' failure to timely raise the issue, the ALJs ruled that "the ALJs do not have a good way to determine the effect of this error."<sup>111</sup>

Protestants argue that this issue regarding Dr. Furnans means that the Executive Director's antidegradation review was incorrect.<sup>112</sup> The ALJs correctly held that even crediting Protestants' late raised issue—and even assuming Protestants supported it with evidence—they could still "not conclude that Mr. Schaefer's use of Dr. Furnans's salt-mass balance in his antidegradation

<sup>&</sup>lt;sup>108</sup> PFD at 49-50.

<sup>&</sup>lt;sup>109</sup> PFD at 49-50.

<sup>&</sup>lt;sup>110</sup> PFD at 49-50.

<sup>&</sup>lt;sup>111</sup> PFD at 50.

<sup>&</sup>lt;sup>112</sup> PAC Exceptions at 19-20; Kings' and Steves' Exceptions at 35-37.

review renders it inaccurate."<sup>113</sup> The ALJs correctly ruled that based on the totality of the evidence, Mr. Schaefer had "an accurate understanding of what the salt-mass flux calculation would show, and its limits."

The ALJs, therefore, should reject Protestants' exceptions regarding Dr. Furnans because the issue was not timely raised, and there is no evidence in the record to allow the ALJs to determine the effect—if any—of the issue on salinity levels. The ALJs should maintain their ruling that to "the extent that there are concerns with increasing salinity at slack tides when there is low ambient salinity, a salinity permit limit would address those concerns."<sup>114</sup>

#### b. The ALJs should reject this argument even if it had not been waived because the evidence shows that the desalination facility would contribute less than 1% of the daily salt mass through the area of the channel of the diffuser.

Protestants claim that this "salt mass miscalculation" "suggests that the Port Authority misunderstood its own calculation to arrive at a finding of no significant impact" and that "the SUNTANS modeling conducted by Dr. Furnans was shown to rest on an erroneous input."<sup>115</sup> They ask, as if this one alleged conversion error taints the entirety of the two weeks of testimony in this case, "if the conclusion that the permit is protective rests on an expressly faulty input (by an order of magnitude), then how can the applicant be interpreted to have met the burden of showing a preponderance of the evidence?"<sup>116</sup>

These arguments misstate the facts and intentionally misrepresent the impact of any such conversion error. First, as the undisputed testimony showed, the SUNTANS modeling was

<sup>&</sup>lt;sup>113</sup> PFD at 52. The ALJs correctly held that Protestants' other issues regarding Dr. Furnans are "presented without evidentiary support." *Id*.

<sup>&</sup>lt;sup>114</sup> PFD at 53.

<sup>&</sup>lt;sup>115</sup> Audubon's Exceptions on Remand at 4.

<sup>&</sup>lt;sup>116</sup> Audubon's Exceptions on Remand at 4.

completed before the original application was even referred for a contested case hearing, the SUNTANS modeling is completely independent of the salt flux balance and the salt flux balance was not an input in the SUNTANS modeling.<sup>117</sup> Second, the Port Authority suspects the reason that the issue was only raised as a "gotcha" after the evidence was closed, was that closer examination shows that even accounting for the conversion issue, the increase in salt in the area of the discharge is less than 1%. The 6.2% cited in PAC's Exceptions is based on a scenario which cannot ever happen, because (a) it assumes that the ambient salinity in the channel is 15 while the effluent salinity is 68.7 and, more importantly (b) it assumes that the ambient flow through the channel is 0.05 m/s for an entire 24-hour period.

The evidence shows that the ambient flow of the current in the channel in the area of the diffuser is approximately .5 m/s.<sup>118</sup> So even using the revised conversion, the salt mass balance shows that the contribution of the desalination facility, based on the daily average ambient flow velocity, would be .62%, even if one assumed the ambient salinity was 15 and the effluent salinity was 68.7. Looking at a more realistic assumption, that the ambient salinity in the channel was 39 when the effluent salinity is 68.7, the daily contribution would be only .24% at the .5 m/s average velocity. As a result, this conversion error does not change the basic premise to show that the desalination facility would contribute less than 1% of the daily salt mass through the area of the channel of the diffuser.<sup>119</sup> It is meaningless and certainly has no impact on the remainder of Dr. Furnans' testimony, much less the rest of the Port Authority's expert testimony and evidence.

<sup>&</sup>lt;sup>117</sup> See Exhibits APP-JF-13, APP-JF-1 at 4-5.

<sup>&</sup>lt;sup>118</sup> APP-KD-6-R (average velocity based on readings every six minutes from May 24 - Dec. 31, 2021 = .524 m/s). The Kings' and Steves' argument, based on one snapshot of the channel velocity, that the water velocity in the area of the diffuser is contradicted by their own expert. Dr. Austin, writing to counsel for PAC and the Kings and Steves, noted that the velocity near the depression was higher than in the main channel. APP-JF-1-R Rebuttal at 4-5.

<sup>&</sup>lt;sup>119</sup> In the Kings' and Steves' Reply, counsel also attempts to introduce other new testimony regarding Dr. Furnans' salt mass flux which is not supported by any witness in this case and, as usual, is wrong. As explained in Dr. Furnans'

The ALJs, therefore, should reject Protestants' exception on this issue.

# I. 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. (Issue A)

The Port Authority will not repeat the voluminous arguments, evidence, or testimony that the ALJs reviewed and analyzed in the PFD on this issue but will respond to the arguments that Protestants offer in the exceptions. PAC claims that the WET testing is insufficient and that the Outfall will fail the WET testing. They also argue that the ALJs did not give proper weight to the Thomas study that they call the TPWD paper. Finally, they argue that the 2ppt at 100 meters is insufficient although they admit that they supported that standard in their Closing Arguments.

After an extensive review of the evidence and the parties' arguments, the ALJs correctly determined that the Draft Permit with the additional requirements was protective of the marine environment, aquatic life, and wildlife, including birds and endangered or threatened species, spawning eggs, or larval migration. Nothing in PAC's exception raises new arguments or justifies the ALJs revising the PFD. As for WET testing, PAC does not dispute that the WET testing that the Port Authority voluntarily agreed to<sup>120</sup> complies with the TSWQS and has been approved by TCEQ and EPA<sup>121</sup> or that conducting the tests will be protective of the marine life and the environment. The Port Authority disagrees with PAC's supposition that the Outfall will not meet the Draft Permit's WET testing based upon the Port Authority's own testing from Stillmeadows

prefiled testimony, the salt mass flux demonstrates the contribution of salt to the system. The cross-section used in the updated salt mass flux was based on the actual ADCP transect data collected by Parsons in June 2021, so it accurately represents the cross-section of the channel at the point of the discharge and as the water flows in or out, the volume of what moving through the channel at that point. APP-JF-1-R at 10. The Kings' and Steves' argument that the calculations are unreliable because mass of salt in the ambient includes salt that would be miles away from the diffuser is specious. As is clear from the evidence, the effluent from the proposed facility moves with the ambient current, so the ambient salt is moved five miles away, the salt from the discharge is also moved five miles away from the diffuser point.

<sup>&</sup>lt;sup>120</sup> ED-KC-1 at 4; ED-KC-6 at 60 (Nov. 2020 hearing).

<sup>&</sup>lt;sup>121</sup> ED-MP-1 Remand at 4-5.

and for the reasons set out in the expert testimony from Randy Palachek, Dr. Lial Tischler, Dr. Lance Fontenot, and Dr. Nathan Knox.<sup>122</sup> But more to the point, the WET testing is one of the protections in the Draft Permit that the ALJs justifiably relied upon in reaching their ultimate decision along with all of the other requirements in the Draft Permit, including those that the ALJs added in the PFD. The ALJs added a 2 ppt at 100 meters salinity standard to address any abrupt changes in salinity and any uncertainty of the modeling results, and they determined that the WET testing would require that "the Port Authority will still have to ensure its effluent can comply with the longer timeframes used for acute and chronic toxicity testing."<sup>123</sup> Given the voluminous evidence introduced regarding the limited size of the ZID as covering no more than 5% of the CCSC in the area and Dr. Stunz's testimony that only 2% of the red drum larvae will be exposed to the ZID, Protestants cannot realistically claim that the Outfall poses a risk to red drum or another aquatic species.<sup>124</sup>

PAC renews the same arguments regarding the Thomas study, which it refers to as the TPWD study, that the ALJs have already analyzed and rejected. The ALJs correctly determined that the Thomas study's value was "not sufficiently reliable" because "the result for 3-day-old larvae appears to be an outlier when considering the data for younger and older larvae."<sup>125</sup> For the reasons that the ALJs identified in the PFD, Thomas' value regarding 3-day-old larvae is questionable and cannot refute the other evidence presented in this matter, including the data that the ALJs referenced in the PFD: the Port Authority's toxicity testing from Stillmeadows; Kesaulya et al (2018) (best hatch out and growth rates occurred for red drum at between 33ppt and 43 ppt);

<sup>&</sup>lt;sup>122</sup> Dr. Stunz testified that mysid shrimp, inland silverside, and red drum had "roughly the same" tolerance to higher salinities. Tr. Vol. 5 at 1289-1291.

<sup>&</sup>lt;sup>123</sup> PFD at 88.

<sup>&</sup>lt;sup>124</sup> Port Authority Closing Argument on Remand at 8.

<sup>&</sup>lt;sup>125</sup> PFD at 86.

Robertson et al. (1988) (no effect for red drum at 45 ppt); Stunz et al (2015) (salinity in the Corpus Christi Bay naturally varies from 28 to 42 ppt). Protestants make no effort to explain why the ALJs' analysis of the Thomas article is incorrect. Instead, they reoffer the same arguments that the ALJs have already correctly rejected.

PAC concludes its arguments on this issue by challenging the 2 ppt at 100 meters salinity standard that the ALJs added to the Draft Permit although they proposed that limit in their briefing.<sup>126</sup> PAC told the ALJs in April that "[i]nstead of setting an effluent percentage limit based purely on what CORMIX predicts will occur, the Draft Permit should include a salinity limit of 2 ppt or 5% above ambient salinity levels" as being "consistent with TPWD/GLO recommendations and the salinity limits recommended by the California State Water Resources Control Board."<sup>127</sup> It is not just PAC who offered the 2 ppt at 100 meters. The King/Steves also recognized the 2 ppt limit at 100 meters.<sup>128</sup> PAC's expert witness, Dr. Schlenk, advocated this standard as being protective of marine life in his report "Management of Brine Discharges to Coastal Waters, Recommendations of a Science Advisory Panel."<sup>129</sup> He testified regarding the 2 ppt over ambient standard in his direct testimony as being "developed using other standards from several countries" and "toxicity thresholds derived from other literature sources" to determine a "composite value."<sup>130</sup>

<sup>&</sup>lt;sup>126</sup> PAC's Exceptions at 23. Inexplicably, the Kings/Steves claim in their Exceptions that "the ED did not go back and re-evaluate the recommendation for salinity limits" on remand at page 4. This is easily demonstrated to be false because the original application did not contain the 2 ppt at 100 meters salinity limit and illustrates the casual treatment of the facts and arguments in the Exceptions.

<sup>&</sup>lt;sup>127</sup> PAC's Reply Closing at p. 46.

<sup>&</sup>lt;sup>128</sup> Kings'/Steves' Closing Argument at p. 12.

<sup>&</sup>lt;sup>129</sup> PAC-50R at 12-13.

<sup>&</sup>lt;sup>130</sup> PAC-50R at 12-13.

zone is a no observed effect concentration." Finally, in his direct testimony Dr. Schlenk stated that "most international standards use a 2 ppt/5% standard salinity increase at the discharge area, and this value has been confirmed by studies performed on early life stage red drum, any increase beyond this standard would likely cause additional stress leading to impaired development to organisms entrained within the mixing zone or passing through the mixing zone."<sup>131</sup> He also referred to a "world-wide standards of a 2 ppt/5% change above ambient for protection of aquatic life."<sup>132</sup> On cross-examination, Dr. Schlenk agreed that the literature he had reviewed had not found any impacts of elevated salinity of less than 2 ppt.<sup>133</sup> Finally, Dr. Schlenk agreed that for the Outfall in this matter, the standard he would use would be 5% above ambient or 2 to 3 parts per thousand above ambient at the mixing zone boundary which is consistent, if not more lenient, than the ALJs' standard of 2 ppt at 100 meters.<sup>134</sup> Protestants also sought the testimony of Dr. Tolan who testified in this matter that he would be satisfied with a salinity standard of 2 ppt at 200 meters that is in place at the Carlsbad, California facility.<sup>135</sup> Protestants provide the ALJs with no legitimate reason why the standard they and their expert advocated in April should be rejected in July. Protestants claim that the Draft Permit cannot comply with the 2 ppt at 100 meters salinity requirement. As the Port Authority's experts and modeling demonstrate, the Port Authority's Facility will comply with the salinity requirement and all other requirements of the Draft Permit.<sup>136</sup>

<sup>&</sup>lt;sup>131</sup> PAC-50R at 14.

<sup>&</sup>lt;sup>132</sup> PAC-50R at 16.

<sup>&</sup>lt;sup>133</sup> Tr. Vol. 8 at 1906.

<sup>&</sup>lt;sup>134</sup> Tr. Vol. 8 at 1908.

<sup>&</sup>lt;sup>135</sup> Dr. Tolan is a Coastal Fisheries Ecologist with Texas Parks and Wildlife Department with formal training in larval fish biology and he testified that if the Facility complied with the Carlsbad, California salinity limit he would "have no reason to argue against" the Draft Permit. APP-JT-1-R Revised at 219.

<sup>&</sup>lt;sup>136</sup> The Port Authority refer the ALJs to its prior briefing on this matter, and the PFD at 90.

Protestants continue to base their arguments regarding lethality in the ZID upon the existence of a permanent eddy that will continue to entrain organisms within the increased salinity concentrations of the Outfall. But there is no evidence that such a permanent, or even temporary, eddy exists. Protestants' expert, Dr. Austin, admitted on cross-examination that he did not have a scientific basis for the existence of this elusive eddy.<sup>137</sup> The reasons that Protestants place such a heavy reliance on the eddy is that without it, they have nothing to counter the evidence and testimony establishing that organisms traveling through the ZID will not be exposed to increases in salinity for a sufficient amount of time (minutes and seconds not hours or days) to pose a reasonable risk of causing harm, much less lethality.

Despite the numerous witnesses, dozens of exhibits, and thorough review of this issue, PAC confines its analysis to a few pages that the Port Authority has addressed above, and the Kings/Steves do not address this central issue directly in their Exceptions. Protestants have provided no credible basis for the ALJs to revise or reverse the PFD, Findings of Fact or Conclusions of Law.

# J. Whether the proposed discharge will adversely impact recreational activities, commercial fishing, or fisheries in Corpus Christi Bay and the Ship Channel. (Issue C)

Protestants offer no new arguments regarding this issue, again choosing instead to repeat the claims that the ALJs correctly rejected. The proposed discharge will not adversely affect marine life, the environment, or aquatic species, and therefore it will not adversely affect recreational activities or commercial fisheries in the Corpus Christi Bay. The Diffuser will be 60 feet below the surface and will not interfere with boating or other surface water uses for the CCSC.

<sup>&</sup>lt;sup>137</sup> Port Authority Closing Argument on Remand at 40-41.

The Port Authority incorporates its prior arguments and evidence, including that of Randy Palachek regarding this issue.

Protestants repeat their claim that the 2 ppt at 100 meter salinity limit will not be protective of aquatic life although, again, they advocated for this same limit in their closing arguments. Dr. Schlenk accepted this limit as being protective and confirmed on cross-examination that it is at least as stringent as the limit that he would apply. Protestants then offer Scott Holt's testimony that there is "a reasonable inference" that there could be virtually 100% mortality to red drum larvae exposed to 50 ppt or greater salinity.<sup>138</sup> This statement, of course, is not correct and inconsistent with the evidence that exposure times will be on the order of seconds and minutes and not hours, as the ALJs determined. Mr. Holt's calculations are nothing more than guesswork and inconsistent with the modeling and other data about the CCSC where the Outfall will be located. "[T]he ALJs conclude the Port Authority demonstrated that exposure times to the highest concentrations of salinities in the ZID will be brief."<sup>139</sup> As the ALJs determined "because the discharge will not adversely impact aquatic life if any appropriate limit on salinity is imposed, there will not be resulting adverse impacts to fishing or fisheries."<sup>140</sup>

## K. Whether the Application and representations contained therein are complete and accurate. (Issue D)

In connection with Issue D, PAC takes a second bite at the apple arguing that the depth of the channel used for the CORMIX input makes the application inaccurate. All of the Kings' and Steves' exceptions under Issue D were related to modeling inputs and were discussed above in connection with Issue G.

<sup>&</sup>lt;sup>138</sup> PAC's Exceptions at 24.

<sup>&</sup>lt;sup>139</sup> PFD at 88.

<sup>&</sup>lt;sup>140</sup> PFD at 93.

PAC engages in revisionist history when discussing whether the Applications and the representations therein are complete and accurate vis-a-vis the depth of the channel at the Diffuser. When the Commission ordered the remand, one of the issues in question for which additional information was requested was the depth of the channel. To provide the most current information available, the Port Authority engaged T. Baker Smith to collect bathymetric data for the width of the channel in the area of the proposed discharge and for several hundred meters toward the Gulf and the Corpus Christi Bay. That bathymetric survey was included in the Application and the underlying data was provided to all participants in the Contested Case Hearing. There is no dispute that all parties are fully informed regarding the channel bathymetry, and thereby can determine the depth of the channel at any location for hundreds of meters from the discharge.

The question of the depth of the channel at the location of the discharge is of import only with regard to the CORMIX modeling. It became an issue for remand in part because Protestants claimed, wrongly and without any support, that changing the depth of the channel to 90 feet instead of the 63-foot depth used for the Port Authority's original CORMIX runs would change the predicted mixing conditions, even above 63 feet.<sup>141</sup> During the remand hearing, the need for schematization in CORMIX was discussed in depth and the ALJs found correctly that for CORMIX modeling purposes the correct depth may be a range, not a single point.<sup>142</sup> For the same reasons discussed in connection with Issue G, the depth of the channel used in the CORMIX modeling is accurate. PAC raises no other issues in connection with Issue D.

## L. Whether the Draft Permit includes all appropriate and necessary requirements. (Issue I)

<sup>&</sup>lt;sup>141</sup> PAC 2020-11-30 Closing Argument at 46.

<sup>&</sup>lt;sup>142</sup> PFD at 36.

The additional permit requirements recommended in the PFD were matters which were requested by Protestants. Most notably, Protestants and their experts declared that a salinity limit of 2 ppt over ambient was protective of the marine environment, but mistakenly claimed that including such a limit would require denial of the permit.<sup>143</sup> The Kings'/Steves' Exceptions appear to concede that the addition of a salinity limit of 2 ppt above ambient would make the Draft Permit protective.<sup>144</sup> Audubon Texas applauds the recommendation to adopt quantitative limits on salinity.<sup>145</sup> Evidence introduced at the hearing by Protestants noted that a salinity limit of 2 ppt above ambient is used in permits elsewhere at distances from 120 meters to 300 meters.<sup>146</sup> The Port Authority has previously set out Dr. Schlenk's testimony regarding the 2 ppt at 100 meter salinity limit.

Despite having asked for the salinity limit of 2 ppt over ambient at 100 meters, now that the PFD includes the recommendation of a salinity limit of 2 ppt over ambient at 100 meters, the addition of effluent limits at the ALMZ and HHMZ and the monitoring plan, PAC claims that is not enough.<sup>147</sup> PAC appears to be arguing that because the evidence at the prior hearing was not sufficient to show that the Draft Permit was protective at that time, the addition of a salinity limit, mixing limits and monitoring requirements do not make it sufficient now. But as discussed earlier, the data and Application have changed from the original hearing and the prior concerns regarding the modeling and antidegradation review have been resolved. PAC's claim that "the ALJs simply

<sup>&</sup>lt;sup>143</sup> Kings' and Steves' Closing Argument on Remand at 6; PAC Closing Argument on Remand at 44, 64; PAC-50R at 13.

<sup>&</sup>lt;sup>144</sup> Kings' and Steves' Exceptions to PFD at 3, 38.

<sup>&</sup>lt;sup>145</sup> Audubon Texas's Exceptions to PFD at 3.

<sup>&</sup>lt;sup>146</sup> See Exhibit PAC-7 at 19 (2 ppt above ambient at 120 m - Gold Coast Australia, 2 ppt at 300 m - Oman); Exhibit Kings and Steves -11R at 14 (2 ppt at 200 m – Carlsbad Cal.).

<sup>&</sup>lt;sup>147</sup> PAC Exceptions to PFD at 29.

had process fatigue, and were looking for a way to approve this permit even though the evidence was not better than what they previously recommended denial upon"<sup>148</sup> is wholly without merit and plainly contradicted by the depth of the ALJs' 108-page PFD.

It is telling that PAC does not even attempt to explain how the 2 ppt above ambient salinity limit, which Protestants have championed throughout the hearing process, is now not good enough. Instead, PAC makes misrepresentations regarding the PFD's treatment of the WET testing.<sup>149</sup> The salinity limit of 2 ppt over ambient, which the modeling shows the facility can meet at 100 meters,<sup>150</sup> is acknowledged to be a conservative value even by TWPD and GLO.<sup>151</sup> The Port Authority believes the Draft Permit was complete without the additional provisions, but with the addition of the additional effluent limits, the salinity limit and monitoring, there can be no reasonable doubt that the Draft Permit is protective.

<sup>&</sup>lt;sup>148</sup> PAC Exceptions to PFD at 28.

<sup>&</sup>lt;sup>149</sup> PAC Exceptions to PFD at 29 (PAC claims that "the ALJs basically found that WET testing [in] the Draft Permit (1) helped to salvage Mr. Schaefer's antidegradation review, and (2) resolved the impossibility of predicting real world exposure times."). The PFD finds neither. The PFD notes that Mr. Schaefer considered the WET testing that was performed by the Port Authority on remand as part of his review, not that Schaefer was relying on the Draft Permit's WET testing requirements for his antidegradation review. Further, the PFD does not count on WET testing to "resolve the impossibility of predicting real world exposure times." To the contrary, the ALJs concluded that the Port Authority had demonstrated that the exposure times to the higher salinity concentrations "will be brief." There is no impossibility of predicting real world exposure times so PAC's claim is nonsensical. PFD at 89.

<sup>&</sup>lt;sup>150</sup> The Kings and Steves argue that the permit should be denied because (1) if operated at 50% recovery under extreme conditions (Summer 95th percentile salinity), the modeling shows that it would exceed 2 ppt above ambient at 100 meters, and (2) "[t]he Port has made it clear it will, if it can, operate at the more efficient rate." Kings' and Steves' Exceptions on Remand at 5. The argument is without merit. First, there is no evidence to support point 2, and they cite to none and even if there were, if a 2 ppt above ambient limit was included in the permit, the Port would not be able to operate at 50% recovery under those extreme conditions without being in violation of the permit. The Kings and Steves are essentially arguing that if it is possible to operate a facility in a manner that exceeds a permit restriction, then the permit cannot be issued. If that were the case, no permit could ever be issued.

<sup>&</sup>lt;sup>151</sup> PAC-7 at 5 (Noting that according to the literature reviewed a mixing zone boundary for the 2 ppt over ambient "is conservatively recommended to be 100 meters from the discharge....") While Protestants referred to the 2 ppt over ambient salinity limit at 100 meters as the TPWD and GLO "recommendation" that was not the case. The 2 ppt at 100 meters was listed in the TPWD/GLO report as one of the recommendations from published literature, not as the recommendation of the TPWD and GLO. *See* Exhibit PAC-7 at 5, *see also* Exhibit PAC-37 at 2.

#### M. Audubon Texas has raised no legitimate issues to the PFD or Draft Permit.

Audubon continues to voice concerns that the issuance of the Draft Permit would cause harm to any endangered and threatened bird species in the project area, yet, in its Exceptions, it did not point to any evidence substantiating that concern. Audubon Texas' concerns are even more distant and attenuated than the concerns regarding potential harms to marine life that the ALJs correctly determined are adequately addressed with the additional permit requirements. Audubon bases most of its exceptions to the PFD on the alleged conversion error by Dr. Furnans that is addressed above. Audubon then argues that sustained attention should be paid to sublethal and indirect impacts, as well as multi-stressor effects, but it is unclear whether this is a suggestion for the future or a complaint about the PFD on Remand. In any event, Audubon Texas fails to provide any reasonable justification or support for such hypothetical effects that were addressed at the hearing through the Port Authority's expert witnesses and detailed in the Port Authority's closing arguments which will not be repeated here.

#### N. TCEQ Exceptions to the PFD on Remand.

The Port Authority agrees with the Executive Director's Exceptions to the PFD but believes that additional clarification is needed on two points.

The Executive Director recommended the addition of the words "for salinity" to the first sentence on page 91 of the PFD.<sup>152</sup> So that there is no misunderstanding of the requirement and to be consistent with the expression of the salinity limit as discussed elsewhere in the PFD, the Port Authority respectfully recommends that the ALJs also add the words "above ambient" to the sentence so that it reads as follows:

<sup>&</sup>lt;sup>152</sup> Executive Director's Exceptions to PFD at 4.

"Accordingly, after considering the evidence and argument, the ALJs conclude that, with the addition of a permit limit <u>for salinity</u> of 2.0 ppt <u>above ambient at 100</u> meters from the proposed discharge, the Port Authority has met its burden to prove that the proposed discharge will not adversely impact the marine environment, aquatic life, and wildlife, including spawning eggs and larval migration."

The Port Authority agrees with the Executive Director's suggested revision to Finding of Fact 95, so that it reads: "Under the worst-case conditions modeled by the ED, the proposed discharge will result in salinity levels at the ZID boundary as high as 68.7 44.68 ppt."<sup>153</sup> The same statement from Finding of Fact 95 (that the ED's modeling runs show salinity as high as 68.7 at the ZID) is also included in the PFD in the last sentence of the first full paragraph on page 89. Accordingly, the Port Authority respectfully recommends that the last sentence of the first full paragraph be deleted to correct this error.

#### III. CONCLUSION AND PRAYER

The PFD was the result of the ALJs' thoughtful review, analysis, and synthesis of the evidence and testimony from 23 witnesses who offered testimony. Protestants' Exceptions rehash their earlier arguments and make unsupported claims of process fatigue but provide no basis to change the findings of the PFD, or the ALJs' conclusion that the evidentiary record supports issuance of the Revised Draft Permit. The Protestants have also failed to provide any supportable reason to revise the Findings of Fact or Conclusions of Law. Therefore, the Port Authority requests that the PFD, Findings of and Fact and Conclusions of Law be submitted to the TCEQ Commission for final adoption and that the Draft Permit be issued.

<sup>&</sup>lt;sup>153</sup> Executive Director's Exceptions to PFD at 5.

Respectfully submitted,

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## **CERTIFICATE OF SERVICE**

I certify that on July 21, 2022, a true and correct copy of the foregoing was sent *via* e-mail to all parties.

/s/ Earnest W. Wotring Earnest W. Wotring