

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

<b>IN THE MATTER OF THE</b>	<b>§</b>	<b>BEFORE THE STATE OFFICE</b>
<b>APPLICATION OF PORT OF</b>	<b>§</b>	
<b>CORPUS CHRISTI AUTHORITY OF</b>	<b>§</b>	<b>OF</b>
<b>NUECES COUNTY FOR TPDES</b>	<b>§</b>	
<b>PERMIT NO. WQ0005253000</b>	<b>§</b>	<b>ADMINISTRATIVE HEARINGS</b>

**PORT ARANSAS CONSERVANCY'S  
EXCEPTIONS TO PROPOSAL FOR DECISION ON REMAND**

**July 11, 2022**

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**PORT ARANSAS CONSERVANCY’S EXCEPTIONS**

**TO THE HONORABLE COMMISSIONERS:**

**I. INTRODUCTION AND SUMMARY**

The Port of Corpus Christi Authority of Nueces County (Port) seeks a permit to discharge up to 110 million gallons per day of effluent into one of the most sensitive waterbodies in Texas. This effluent will have double the salinity of ambient seawater. This would be the first such facility in Texas and the discharge would occur adjacent to one of only five major passes along the coast, which are disproportionately ecologically valuable because they are the conduits between the Gulf and coastal estuaries. These passes are the super highways that permit the early life forms of thousands of species, including the iconic redfish, to reach the habitat necessary for their survival and growth. Without estuaries – or reliable access to estuaries – there will be no redfish in Texas.<sup>1</sup>

After a 5-day hearing on the Port’s Original Application in 2020 (the Initial Proceeding), the Administrative Law Judges (ALJs) recommended denial; the Commission remanded, ordering that a “no significant lethality” legal standard be applied, and additional evidence be taken on referred issues.

However, on remand, the Port entirely ignored the scope of the Commission’s Remand Order and submitted a new application, with a new discharge location. The changes were numerous and material, and rendered most of the evidence from the 2020 merits hearing totally irrelevant. The Port offered five new expert witnesses, each of whom had nothing to do with the

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<sup>1</sup> Sunset Advisory Commission Staff Report, TCEQ, 2022-23 88<sup>th</sup> Legislature, at 44 (E-flow standards measure the quantity and timing of water flows necessary to sustain a sound ecological environment for freshwater and estuarine ecosystems.). Redfish already need a lot of help. Texas Parks & Wildlife has stocked 800 million red drum fingerlings along the Texas coast since 1975. Ex. PAC-60R at 4.

original Application or 2020 hearing. This was improper, as the Commission’s Remand Order defined and limited this proceeding on remand, as discussed in more detail further below.

The Port’s changes required the parties to perform completely new modeling. The ALJs have identified numerous inadequacies in that modeling and its results:

The ALJs note that the most serious modeling concerns raised by the parties—the site-specific bathymetry that *cannot* be modeled, salinity concentrations the ED used *to define the critical conditions*, and CORMIX’s *margin of error*—create some *uncertainty* over what the *actual* salinity levels will be.<sup>2</sup>

The PFD states that “the evidence shows that some mortality could occur due to abrupt changes” in salinity.<sup>3</sup> Remarkably, the 108-page PFD does not explicitly state whether the Port carried its burden to prove there would be “no *significant* mortality” to organisms passing through the Zone of Initial Dilution (ZID). However, the ALJs did conclude that without a limit on salinity the preponderance of the evidence *does not* demonstrate the New Draft Permit would ensure (1) that salinity gradients in the estuary would “be maintained to support attainable estuarine dependent aquatic life uses” and (2) that careful consideration was “given to all activities that may detrimentally affect salinity gradients.”<sup>4</sup>

The PFD also acknowledges that the ED’s antidegradation review relied upon the modeling performed by Dr. Furnans, and that Dr. Furnans’ calculations regarding the total amount of salt being discharged per day were off by a factor of 10. However, the ALJs suggest that because the Port Aransas Conservancy (PAC) did not discover the Port’s error soon enough, that the ALJs are “without evidence” to determine the impact of the error. Despite being unable to determine the impact of the error with any certainty, the ALJs conclude that the increase “does not seem” to result in degradation. These determinations are incongruent and cannot be logically justified.

Instead of analyzing the evidence and determining that the Port had affirmatively proven there would be no significant mortality to organisms passing through the ZID, the ALJs simply concluded that adding some permit limitations would remedy any potential problems. Specifically, they recommended the following additional permit requirements: (1) mixing limits for percentages of effluent at the boundaries of all three mixing zones; (2) a salinity limit of 2.0 ppt over ambient

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<sup>2</sup> The June 20, 2022 Proposal for Decision will be cited as “PFD.” PFD at 104 (emphasis added). The PFD that resulted from the Initial Proceeding will be cited as “Feb. 5, 2021 PFD.”

<sup>3</sup> PFD at 89.

<sup>4</sup> PFD at 89 (quoting 30 Tex. Admin. Code § 307.4(g)(3)).

to be measured at 100 meters from the outfall; and (3) a monitoring plan, to be devised by the Port and ED.

If issued, the New Draft Permit absolutely must contain these additional permit requirements. However these three requirements alone are insufficient to make the New Draft Permit protective of the marine environment and the living things that depend on that environment. The preponderance of the evidence does not demonstrate that these three requirements alone will remedy the numerous deficiencies in the Port's New Application or the ED's New Draft Permit. The Permit should not be issued, even with the ALJs' recommended requirements.

## II. GENERAL ERRORS

### A. **The Commission defined the scope of the Remand, which was ignored by the Port, the ED, and the ALJs.**

Under the rules, the Commission “may order the judge to reopen the record for further proceedings on *specific* issues in dispute.”<sup>5</sup> If the Commission does this, its order “shall include instructions as to *the subject matter* of further proceedings and the judge’s duties in preparing supplemental materials or revised orders based upon those proceedings.”<sup>6</sup> Therefore, the scope of the remand is defined, and limited, by the Commission in its order reopening the record.

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

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

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<sup>5</sup> 30 Tex. Admin. Code § 80.265 (emphasis added).

<sup>6</sup> 30 Tex. Admin. Code § 80.265 (emphasis added).

- Whether the Executive Director’s antidegradation review was accurate; and
- Whether the Draft Permit includes all appropriate and necessary requirements.<sup>7</sup>
- The depth of the channel, site-specific ambient velocity, and the depth of the diffuser.<sup>8</sup>

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

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

*I do though think that the process is working* in that the protestants have raised legitimate questions about the protectiveness of the proposed authorization, and now those questions can be addressed.

\* \* \*

And I appreciate the burden this matter has already placed on all of the parties, but in my view, the weight of the equities and the better policy is to remand the matter so that we can determine whether the proposed authorization is indeed protective, based on more precise data inputs. And so that’s, that’s what I would propose.<sup>9</sup>

<sup>7</sup> Interim Order, at 1-2, Paragraph I (May 26, 2021) (emphasis added).

<sup>8</sup> Interim Order, at 2, Paragraph II (May 26, 2021) (emphasis added).

<sup>9</sup> Certified Transcription May 19, 2021 TCEQ open meeting at 49:19-23, 51:4-10, attached as Exhibit A.

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

Perhaps at that open meeting the Port actually did intend to provide supplemental data to support its existing Application, when it’s counsel said “The ALJs disagreed and they wanted more specific data. That’s the type of data that we think we can provide that will show that *being deeper* and having more current enhances the mixing and provides more protection for Marine life and the environment.”<sup>10</sup> But the Port certainly thumbed its nose at Chairman Niermann’s concept of the process “working” when it moved the outfall to a location where the water is approximately 30 feet *shallower* than in its Original Application. In 2020 the ED told the world that such a revision would send the Port back to square one, when its witness testified under oath:

I believe that would require a whole new application. I would need to double-check. But because our reviews are site specific, if they move the outfall, that would, basically, be going back to the beginning.<sup>11</sup>

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

PAC timely raised the issue with the ALJs and requested that a question be certified to the Commission to clarify the scope of the remand, but the ALJs denied that request – **effectively determining that the Commissioners do not determine the scope of any remand, but rather the parties get to.** If this Draft Permit is issued, with or without the changes recommended by the ALJs, it will be clear that the scope of any remand is determined unilaterally by the Applicant. Allowing the Port to ignore the Commission’s Remand Order guts the Commission’s authority.

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<sup>10</sup> Certified Transcription May 19, 2021 TCEQ open meeting at 46:15-19 (emphasis added).

<sup>11</sup> Tr. Vol. 5 at 70:7-12 (ED witness Shannon Gibson at the 2020 merits hearing).

The Sunset Commission recently described the TCEQ Commissioners as “reluctant regulators. . . . delegating much of the initial decision making to staff and, to a certain extent, encouraging industry members to self-govern and self-police.”<sup>12</sup> The Port, for one, is delighted to self-govern and self-police. This case presents an opportunity for the Commissioners to demonstrate that they actually take ownership of their own orders and are willing to meaningfully enforce them.

**B. “No lethality” is the correct legal standard.**

It is important to address a threshold question regarding the legal standard applied in reviewing the Port’s New Application and the ED’s New Draft Permit. The Remand Order instructed the ALJs to apply the “no significant lethality” standard found in 30 Texas Administrative Code § 307.6(e)(1). But, as the ALJs wrote in the original PFD, that section governs “total toxicity” or “standards related to toxicity testing of effluent.”<sup>13</sup> The correct standard is found in sections 307.6(c)(6) and 307.8(b)(2): “no lethality to aquatic organisms that move through a ZID.” In 2020, every witness to testify agreed that “no lethality” was the correct standard. That included the Port’s expert witness, Lial Tischler:

Q: Is it your understanding that the rules of TCEQ require no lethality even at the zone of initial dilution?

A: Yes, you mean within the zone of initial dilution?

Q: Yes.

A: The answer is yes.<sup>14</sup>

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

Q: The regulations, TCEQ regulations, actually dictate that for this discharge, there has to be no death anywhere, even in the zone of initial dilution, isn't that right?

A: Actually, that’s for all permits, ma’am.

Q: So is that a “yes,” that there can be no death?

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<sup>12</sup> Sunset Advisory Commission Staff Report, TCEQ, 2022-23 88<sup>th</sup> Legislature, at 1.

<sup>13</sup> Feb. 5, 2021 PFD at 9.

<sup>14</sup> Tr. Vol. 3 at 245.

- A: Yes, but it applies to all permits.
- Q: Okay. And in order to complete your antidegradation review in the manner that you did, you had to conclude that this discharge will cause no death, right?
- A: That's what I concluded, yes.
- Q: Even in the zone of initial dilution?
- A: Yes.<sup>15</sup>
- ....
- Q: In this antidegradation review, was there any considera- -- besides human health concerns, was there any concern for any effects on oysters themselves, just as a marine creature?
- A: They were considered as part of the exceptional aquatic life use, yes.
- Q: Okay. So they're not supposed to die as a result of this discharge, either, are they?
- A: No.

The ALJs originally applied the correct legal standard and that standard should have applied on Remand.

**C. The United States Environmental Protection Agency has told the ED that this is a “Major” facility, requiring EPA review of the Draft Permit, but the ED has ignored that.**

The ED failed to get the most basic regulatory analyses correct. One of the first steps in the ED’s application review process is to determine whether a permit is “Major” or “Minor.” This should be relatively straightforward but, according to the EPA, the ED miscalculated the points assessed under the EPA Permit Rating Worksheet by at least 35,<sup>16</sup> and incorrectly classified the discharge as Minor, when it is Major. The ALJs have concluded that this issue is outside the scope of the Remand.<sup>17</sup>

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<sup>15</sup> Tr. Vol. 5 at 178:16-179:5.

<sup>16</sup> Just by way of example, the ED failed to assign 10 points for a facility located in an estuary in the National Estuary Protection Program. Ex. ED-SG-8 (TPDES Permit Major/Minor Rating Work Sheet). That is a verifiable fact that is not in dispute and allows for no discretion.

<sup>17</sup> PFD at 13.

Whether an application is Major or Minor directly impacts the type of review that TCEQ must conduct as part of its application review process,<sup>18</sup> and whether the EPA needs to review and approve of the Draft Permit. EPA’s stated concerns are not limited solely to the Major/Minor determination. EPA also raised concerns regarding TDS, sulfates, and chlorides, the Tier 2 Antidegradation Review process, and WET testing requirements—each of which are clearly relevant to one or more referred issue.<sup>19</sup>

The definitions of Major and Minor come from federal regulations, developed and overseen by EPA, and the evaluation is made using an EPA-promulgated worksheet. The EPA objection letter states that the ED’s permit review fell short of compliance with applicable federal regulations and the Draft Permit would “not be a validly issued NPDES permit” if issued without addressing all of EPA’s concerns. As of the merits hearing, the ED knows that EPA is not satisfied with TCEQ’s response.<sup>20</sup> The ED just simply does not care.

Q. Ms. Gibson, what has just been admitted as ED-13 is your major/minor permit, and I’m going to show that to you. And, again, you completed this in 2018 with respect to the original application, correct?

A. Yes, ma’am.

Q. And you did not complete a new one before the amended application, correct?

A. A new one was not required, so no.<sup>21</sup>

....

Q. . . . the TCEQ did not forward the draft permit to the EPA because you, Shannon Gibson, designated the Port’s proposed facility as a minor facility, agreed?

A. Yes.

...

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<sup>18</sup> Remand Tr. Vol. 9 at 2260:21-24 (Ms. Gibson testifying that “discharges of processed wastewater undergo a slightly heightened review with the water quality assessment and made sure there are additional permitting requirements.”).

<sup>19</sup> PAC 89-R.

<sup>20</sup> Remand Tr. Vol. 9 at 2233:16-23.

<sup>21</sup> Remand Tr. Vol. 9 at 2254:8-16.

Q. The EPA has told TCEQ in this letter that your determination was incorrect, hasn't it?

A. That's what the words say, yes, ma'am, that's correct.

....

Q. They [USEPA] say that the classification of this facility, the Port's facility, should be changed from minor to major, correct?

A. That's what they say, yes, ma'am.

Q. . . . Is it your testimony today under oath that the Port's proposed desal is a major facility?

A. No ma'am.

Q. Is it then your testimony that you disagree with the EPA and what it says here in the middle of the page?

A. Yes, ma'am.

....

Q. Have you determined that you are correct and the EPA is incorrect about how to classify this facility s either major or minor?

A. Yes ma'am.

Q. And has your determination been that EPA is wrong?

A. Yes, ma'am.<sup>22</sup>

EPA has also told TCEQ that going forward all desalination facilities should be classified as Major facilities.<sup>23</sup> As of the merits hearing, TCEQ and Ms. Gibson are simply ignoring that directive.<sup>24</sup> Even if TCEQ disagrees with EPA's interpretation of EPA's regulations as to what constitutes a waste stream, EPA's major/minor classification instructions allow it to make a facility a "discretionary major" facility, if EPA "feels the facility should still be considered a major."<sup>25</sup> Furthermore, in choosing not to classify the desalination facility as "major," TCEQ is failing to

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<sup>22</sup> Remand Tr. Vol. 9 at 2255:12-2258:5.

<sup>23</sup> Remand Tr. Vol. 9 at 2258:6-11.

<sup>24</sup> Remand Tr. Vol. 9 at 2259:8-23.

<sup>25</sup> See "Instruction for Completing the NPDES Permit Rating Work Sheet" at 5.

conduct a “heightened review with the water quality assessment” and failing to include “additional permitting requirements” that apply to major facilities.<sup>26</sup> The Commission should not allow such clear disregard of the applicable law.

### III. THE TCEQ’S REFERRED ISSUES

#### A. **Whether the Modeling Complies with Applicable Regulations to Ensure the Draft Permit is Protective of Water Quality, Utilizing Accurate Inputs (Issue G).**

On May 26, 2021, the Commissioners ordered that SOAH take “additional evidence” on whether “the modeling complies with applicable regulations to ensure the Draft Permit is protective of water quality, including utilizing accurate inputs.”<sup>27</sup> But the modeling, modeling inputs, and Draft Permit that the Commissioners had in mind when they issued the Remand Order were *not* the subject of the merits hearing and PFD on Remand. The merits hearing and PFD address an entirely new application, containing modeling, inputs, and a Draft Permit for a new discharge location—not the discharge location that was the subject of the remand. In short, the Port and the ED went back to square one, but skipped all of the pesky administrative steps such as publishing notice of the new application, hosting a public meeting to hear and address the public’s concerns, receiving and responding to public comments, and sending the application of a major facility to EPA for review. Even with all of those clear procedural errors, the new modeling for the new discharge location still does not satisfy the applicable standards.

Permit limits have not been established by the ED based on a determination of what will be protective. Rather, the results of the CORMIX modeling (the “critical conditions”) were simply plugged into the Draft Permit—essentially meaning that the ED just accepted what the modeling revealed and set that as the permit limits. This is the equivalent of saying “How fast can your car drive? 140 miles per hour? Ok, then the speed limit is 140 miles per hour.” Thus, bad modeling – whether caused by inaccurate inputs, poor execution, or a misinterpretation of the results (all of which occurred in the Initial Proceeding) – will lead to a bad Draft Permit.

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<sup>26</sup> See Remand Tr. Vol. 9 at 2260.

<sup>27</sup> Interim Order, at 2(G), Paragraph I (May 26, 2021).

As the ALJs recount, the Port originally contended that it could not only satisfy, but beat, a limit of 2.5% effluent at the edge of the ZID. That was false.<sup>28</sup> Then, the Port contended that it could satisfy a limit of 18.4% at the edge of the ZID. That was also false – the Port knew it – and did all it could to conceal that fact. The ALJs concluded (and Commissioners agreed) that the modeling inputs, including for depth of the channel, slope of the channel bottom, and ambient velocity of the water in the channel, were wrong.<sup>29</sup>

On remand, the Port has proposed a new outfall location (thus new and different depth of the channel, slope of the channel bottom, and ambient velocity) and substantially different diffuser design and contends that it can satisfy a limit of 14.6% at the edge of the ZID, 8.9% at the ALMZ, and 5.4% at the HHMZ.<sup>30</sup> It relies heavily on Dr. Lial Tischler who originally endorsed the limit of 2.5% at the edge of the ZID and only admitted that the Port could not satisfy a limit of 18.4% when subjected to vigorous and skillful cross examination at the initial hearing.<sup>31</sup> But, like before, the Port’s inputs into the modeling are wrong, yet the ALJs (apparently out of process fatigue) just ignore that and rationalize away clearly incorrect data.

**Channel Depth:** The Port’s Original Application identified the channel depth at the discharge location as 63 feet even though the actual depth was close to 90 feet.<sup>32</sup> That is a problem

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<sup>28</sup> The PFD states that “after this case was referred to SOAH for the Initial Proceeding, the ED acknowledged an error in how the results were initially interpreted.” PFD at 14. In fact that error was uncovered by PAC and its expert modeler.

<sup>29</sup> PFD at 14. The only rational reason for the Port to take the time and incur the expense of starting from scratch on remand – with a new location and new diffuser – is that when it used its original location and original design, and CORRECT inputs, including for depth of channel, slope of channel bottom, and ambient velocity – the results were disastrous.

<sup>30</sup> PFD at 14.

<sup>31</sup> Less than a month before the Initial Proceeding, Lial Tischler produced a new diffuser design. Tr. Vol. 3 at 218:2-15. He was asked some version of “why did you change the design” several times at the Initial Proceeding. *See e.g., id.* at 222:1-7, 252:23-253:6. He was, to put it charitably, evasive. Tr. Vol. 3 at 254:6-11 (“this was done for the purposes that I already stated, which was to evaluate whether or not minor changes in the diffuser configuration could eliminate the high effluent percentages in the ZID that occur at the higher current rates.”). Only after testifying for an hour and a half, on re-cross, did he finally admit that his original diffuser design – the one submitted with the Original Application, that was the basis of the Original Draft Permit and the Initial Proceeding – would need to be “revised” in order to satisfy the Permit limits. Tr. Vol. 3 at 264:20-265:3 (“They may have difficulty meeting the 18.5 percent in the ZID, unless they make revisions to the design. . . . They may not meet it. . . . Under the conditions of high flow rates, the modeling would suggest that they couldn’t meet it.”).

<sup>32</sup> “While the CORMIX model is not a perfect representation of actual conditions, the results of the model are only as reliable as the accuracy of its inputs, with recognition of its limitations. In this case there is really no dispute that the inputs into the CORMIX model for channel bathymetry are not accurate. The evidence is conclusive that the depth of the channel at the outfall location is close to 90 feet, but the modeling used an input of 63 feet.” Feb. 5, 2021 Proposal for Decision, at 30.

because the “depth at discharge is a *required input* for the CORMIX model and is a variable that influences near-field mixing predictions.”<sup>33</sup> This matter was remanded, in part, to correct for that specific error. Instead the Port has simply made the same mistake in reverse – which the ED and ALJs have decided is just fine.

The Port’s bathymetry shows that the depth at the new location of the discharge is actually 65 feet.<sup>34</sup> But the Port and the ED used 90 feet as the CORMIX input.<sup>35</sup> No one contends that 90 feet is the actual depth at that location. Even the ALJs concede this. Rather the ALJs state that 90 feet “was among a range of reasonable options” because Dr. Tischler testified that somewhere south of the discharge, the channel is eventually 90 feet deep.<sup>36</sup> Under some conditions (which the ED says occur infrequently and for short duration)<sup>37</sup> the plume of effluent will hit the bottom of the channel and eventually flow downhill to the 90 feet depth.<sup>38</sup>

To be clear “CORMIX’s conservative module requires the modeler to select *a single value*” for depth of discharge.”<sup>39</sup> This single value requirement does not allow the applicant to ignore the actual depth where the discharge will take place for the use of any depth that happens to occur within the entire waterbody at a location arbitrarily selected by the modeler. The Commission remanded for accurate information on the depth of the channel at the location of the discharge yet the Port has arbitrarily chosen a depth—one that is, as conceded by the ALJs even, not the depth at the actual location of the discharge. Moreover, 90 feet is not even the deepest part of the channel in that area, as the Port’s own bathymetry map shows a depth of 95 feet in the same area. Yet the Port did not use the actual depth at the location of the discharge, nor the deepest depth in the area, but simply chose an arbitrary number to include in the application. If the Commission remanded before for this same issue, it is hard to see why it could ignore it this time and approve the Draft Permit.

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<sup>33</sup> PFD at 16 (emphasis added).

<sup>34</sup> PFD at 36.

<sup>35</sup> PFD at 17.

<sup>36</sup> PFD at 17.

<sup>37</sup> PFD at 70; Finding of Fact 96.

<sup>38</sup> PFD at 36.

<sup>39</sup> PFD at 36.

**Ambient Velocity and The Eddy:** This topic is relevant, in part, to the issue of “duration” or the amount of time any organism may be exposed to excessive salinity in the effluent. How to even evaluate “duration” or exposure time was hotly contested. The Port argued that the “real world” exposure duration of any organisms in the Corpus Christi Ship Channel to the effluent is highly relevant,<sup>40</sup> and would be very brief.<sup>41</sup> That real world duration is, of course, impossible to determine in any case, not just this one. It is why regulatory limits are established based on laboratory testing, which follows uniform protocols and evaluates exposures of 24 or more hours.<sup>42</sup>

The ALJs ultimately ignored much of the testing, and concluded that the real world exposure times for any organism will be “on the order of seconds and minutes, rather than hours.”<sup>43</sup> That Finding of Fact underpins the recommendation of a salinity limit of 2.0 ppt at 100 meters to negate the effluent’s adverse impact on the marine environment and aquatic life.<sup>44</sup> And it is a chimera. The PFD states that in the Initial Proceeding “it was undisputed” that an eddy occurred near the outfall location.<sup>45</sup> But that is an important understatement. The Port’s witnesses – and its lawyers – repeatedly told the ED, the ALJs, and the Commissioners that there was an eddy, as an affirmative fact.<sup>46</sup> But they did not stop there – they relied on that eddy for the hypothesis (never tested by the Port’s many experts) on which they expected everyone to rely in granting a Permit: “our expert testimony provided this in the record – that that eddy and that localized increase in depth enhances the mixing, and makes, makes existing modeling more conservative.”<sup>47</sup> Forced to actually employ the scientific method and gather some data, on remand the Port now says it has disproven the existence of an eddy.<sup>48</sup> The ALJs were not convinced but essentially ignored the impact of the eddy.

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<sup>40</sup> PFD at 76.

<sup>41</sup> PFD at 67.

<sup>42</sup> PFD at 7 (note 15), 76-77. The EPA WET test methods prescribed by the New Draft Permit require exposure periods of 24, 48, and 96 hours. Ex. Kings-Steves-17R at 13.1.2, and Ex. Kings-Steves-23R at 14.1.2.

<sup>43</sup> PFD at 88.

<sup>44</sup> PFD at 91.

<sup>45</sup> PFD at 38.

<sup>46</sup> Certified Transcription May 19, 2021 TCEQ open meeting at 46:8-14.

<sup>47</sup> *Id.*

<sup>48</sup> PFD at 26.

The PFD states that no party found a “persistent” eddy, at most there is an occasional eddy, and “the impact [of that eddy] is not clear.”<sup>49</sup> It “could enhance mixing, but alternatively, [] it could trap organisms and lengthen exposure times.”<sup>50</sup> How often and for how long? The PFD does not ask or answer those questions. There is no attempt to reconcile this uncertainty with the Finding that exposure time for any organism will be no more than minutes. Thus, the Port has failed to carry its burden. This uncertainty should be fatal to the New Draft Permit.

**Bathymetry, Critical Conditions, and Margin of Error:** The PFD states that the ALJs considered “whether the modeling ensure[s] the draft permit is protective of water quality.” But that is lip service. After enumerating serious substantive problems that demonstrate the modeling does not ensure the draft permit is protective, the PFD states that these factors:

“do not criticize the modeling inputs themselves, but rather implicate how the outputs should be evaluated.<sup>51</sup> . . . In summary, the Port Authority’s and ED’s modeling inputs are either within the range of reasonable values or are not materially inaccurate. The parties also have not identified any regulatory requirement that the modeling failed to comply with.”<sup>52</sup>

Thus the ALJs simply focused on whether the inputs were “reasonable”<sup>53</sup> and the whether the Implementation Procedures were followed, regardless of whether the outputs are reasonable. Thus, despite the clear unreliability of the outputs, the modeling gets a passing grade.

The PFD states the obvious and objective fact that the ED’s critical conditions are not the worst-case scenario for salinity, and then concedes that this “calls into question whether the critical conditions derived from the modeling are protective of aquatic life with respect to salinity.”<sup>54</sup> In other words, for this first-of-its-kind facility, where salinity is the constituent of concern, we know the ED ignored the modeling results specifically for salinity in setting the Permit Limit. That does not merely create a “question.” If the modeling cannot provide the worst-case scenario for salinity, or if the ED cannot or will not correctly interpret the modeling, the result is the same: the modeling,

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<sup>49</sup> PFD at 38-39.

<sup>50</sup> *Id.*

<sup>51</sup> PFD at 39.

<sup>52</sup> PFD at 40.

<sup>53</sup> Not whether the inputs were “correct.”

<sup>54</sup> PFD at 40.

either by design or because of improper utilization, **is not protective of water quality**. But it gets worse, because this problem is compounded by the next two conclusions in the PFD.

The PFD states that the site-specific bathymetry – the outcroppings (the “cove”) and the 90’ hole – “introduce *some uncertainty* into the CORMIX modeling results.”<sup>55</sup> Said more plainly, when CORMIX predicts 14.6% effluent at the edge of the ZID, we have no idea how close that is to the real world mixing that will occur. Does “some uncertainty” mean that maybe, under some conditions, it will really be 20%? Or 40%? Or 60%?

Finally, CORMIX has a 50% margin of error, meaning that when the modeling predicts 14.6% effluent at the edge of the ZID, in reality that may end up being as high as 21.9%.<sup>56</sup> Perhaps rarely. Perhaps all day, every day. Unfortunately, there is no way to know whether the discharge actually meets the effluent percentage limits at the mixing zone boundaries. As the ALJs have already pointed out, those effluent percentage limits are solely based on the CORMIX model outputs, not on actual measurements of effluent at the mixing zone boundaries. Despite knowing that the effluent percentage limits can never actually be measured, the ED argues that the permit “does not authorize the exceedance of the modeled effluent percentages when they are used to set permit limits.”<sup>57</sup> In other words, when the Port’s desalination facility discharges up to 110 million gallons a day of hyper-saline brine into the Corpus Christi Ship Channel, despite the inability to actually measure effluent percentages at the mixing zone boundaries, all these modeling uncertainties, and the 50% CORMIX margin of error, the Port and the ED would have you believe that there will not be 21.9% effluent at the edge of the ZID, simply because the Draft Permit says so. This is no way to actually be protective of aquatic life.

## **B. Whether the Executive Director’s Anti-Degradation Review Was Accurate (Issue H).**

The Tier 1 antidegradation review requires that “[e]xisting uses and water quality sufficient to protect those existing uses must be maintained.”<sup>58</sup> The Tier 2 antidegradation review (1) prohibits the lowering of water quality by more than a de minimis amount;<sup>59</sup> (2) salinity

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<sup>55</sup> PFD at 39.

<sup>56</sup> PFD at 34.

<sup>57</sup> PFD at 40.

<sup>58</sup> PFD 41; 30 Tex. Admin. Code § 307.5(b)(1).

<sup>59</sup> PFD 41; 30 Tex. Admin. Code § 307.5(b)(2).

gradients in estuaries must be maintained to support attainable estuarine dependent aquatic life uses; and (3) careful consideration must be given to all activities that may detrimentally affect salinity gradients.<sup>60</sup>

This case was remanded so the ALJs could take additional evidence on whether the ED's antidegradation review was accurate. No such evidence was presented. Instead, the ED tossed its original antidegradation review, replaced Dr. Wallace with Mr. Schaefer, and conducted a new and different review of a new application.<sup>61</sup> One step in this new review process "was to assign critical conditions for the outfall location" – ironically, these are the same critical conditions that the PFD states are not the worst-case scenario for salinity.<sup>62</sup>

**Mr. Schaefer's Knowledge and His Review Process:** The ED's new antidegradation review was performed by Mr. Schaefer, an aquatic scientist at TCEQ, and the Team Leader of the Standards Implementation Team.<sup>63</sup> Despite his experience and position, Mr. Schaefer could not even define "salinity gradient" or "*de minimis*"—two key terms essential to the antidegradation review under the applicable law. As to *de minimis*, to be clear, it is not that Mr. Schaefer was incapable of perfectly reciting a detailed or technical definition from TCEQ rules; everyone agrees that no such definition exists. The problem is that he could not provide his own, plain English definition of the standard that he is tasked with enforcing. When asked in the comfort of his own office, "What is the definition of *de minimis*?" he replied, "*De minimis* is not defined by the Texas Water Code, the Texas Administrative Code or the Implementation Procedures (IPs)."<sup>64</sup> This non-answer implied what he more explicitly stated live at hearing when he was asked, "Do you have a definition of *de minimis* that you used in your review?" He answered, "No. I don't."<sup>65</sup> He was simply unable to define the very standard that, in his expert opinion, the Port had clearly met.

As to the definition of "salinity gradient," his testimony is slightly less stark. Although he had earlier been deposed regarding his definition of this term, he offered no prefiled direct

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<sup>60</sup> PFD at 41; 30 Tex. Admin. Code § 307.4(g)(3).

<sup>61</sup> PFD at 53.

<sup>62</sup> PFD at 40, 42.

<sup>63</sup> PFD at 42.

<sup>64</sup> Ex. ED-PS-1-Remand, at 24:28-30.

<sup>65</sup> Remand Tr. Vol. 9, at 2384:9-11.

testimony regarding it. In hearing, he said, “I don't know the precise definition, no, sir.”<sup>66</sup> He also acknowledged not knowing if the time over which the change in salinity occurs was a component of the definition.<sup>67</sup> If one does not know whether a gradient is measured over time or is measured over distance, it is a stretch to find that that person has even a general understanding of the “gradient” concept embodied in the Water Quality Standards. Mr. Schaefer’s counsel did not explore his understanding of either term in re-direct examination.

The ALJs, nonetheless, credit Mr. Schaefer with “a general understanding of the concepts.”<sup>68</sup> That is like saying that someone with a general understanding of electricity could rewire your house. Or someone with a general understanding of dentistry could give you a root canal. The ALJs’ disregard of Mr. Schaefer’s lack of knowledge or understanding of the essential elements of an antidegradation review is shocking.

Moreover, “he indicated that by following the IPs’ guidance, he can ensure no more than de minimis degradation.”<sup>69</sup> Then he described the steps he took to follow the IPs. In other words, he has a recipe – and he followed it. Mr. Schaefer is worth quoting at some length because his testimony demonstrates the ad hoc nature of his approach and that, contrary to the PFD,<sup>70</sup> he *did not* consider the only actual testing data to show the impacts of salinity on aquatic life—Dr. Nielsen’s data. Perhaps he used Dr. Wallace’s gazing ball and could see what would come out in the future merits hearing:

- A. Okay. So like I said, it started out looking at the Texas Water Development Board paper and that *gave me an idea*, okay, so what’s a tolerance for organisms that are going to be found in this area, red drum, which everyone has been talking about, stood out, and looking at the – *the optimal range that was given in that of 20 to 35 ppt*, I’ve calculated the effluent percentage at *the edge of the mixing zone*. It was within that – that level, and then, of course, looking at the SUNTANS modeling, the WET data results, and then the additional information that this hearing has brought out has kind of fallen in line like the Nielsen – *of course, I didn’t use that in my initial review* but the Nielsen data on the red drum, that sort of falls into place with the water development board results and kind of gives me more assurance

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<sup>66</sup> Remand Tr. Vol. 9, at 2349:21.

<sup>67</sup> Remand Tr. Vol. 9, at 2350:5-6.

<sup>68</sup> PFD at 46.

<sup>69</sup> PFD at 47. The IPs do not contain the terms “de minimis” or “salinity gradient.” The IPs have never before been used to evaluate a permit for discharge from a marine desalination facility.

<sup>70</sup> PFD at 47 (listing consideration of Dr. Nielsen’s data as part of Mr. Schaefer’s “process” without citation to the record).

that at the edge of that aquatic life mixing zone, we're going to be within that range of tolerance for those, the red drum. Looking for areas within the ZID, within the mixing zone, that's where the whole effluent toxicity data comes into play.

Q. Understood. So at the edge of the aquatic life mixing zone, I believe that you used an 8.9 percent effluent – an effluent –

A. Percentage?

Q. Percentage. Thank you, sir. Is that accurate?

A. That is correct.

Q. And where did you get that number from?

A. From the critical conditions memo.<sup>71</sup>

So his “process” was actually as follows: Mr. Schaefer looked at the TWDB paper and found that it says the “optimal range” of salinity for red drum is 20-35 ppt. Except that is incorrect. The TWDB paper does not use the word “optimal” with respect to red drum at all. It states that red drum survived from hatching to two weeks and grew equally well in 15-30 ppt water.<sup>72</sup> And Figure 24 provides the range of salinity that will result in “no salinity related mortality during the pelagic larval stage.” For red drum the upper limit is not 35; it is 33 ppt.<sup>73</sup> So, one of his initial considerations was simply wrong.

Mr. Schaefer says that he then calculated the effluent at the edge of the mixing zone at 8.9% effluent. He did no such calculation – that 8.9% is the CORMIX result produced by Ms. Cunningham and the Port. He testified that if those results were not accurate, he would want to “revisit” his antidegradation review.<sup>74</sup> Well, as the PFD states, those results are in fact unreliable. Of course, Mr. Schaefer could not have known that – or accounted for the inability to model for the site-specific bathymetry, the failure to use the worst case scenario in developing the critical conditions, and the CORMIX margin of error – when he performed his review. And he does not claim he did. He simply accepted the CORMIX results as gospel.

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<sup>71</sup> Remand Tr. Vol. 9 at 2384:20 - 2385:24 (emphasis added).

<sup>72</sup> EX PAC-85R at 55 (Bates Port Authority 041392).

<sup>73</sup> EX PAC-85R at Fig. 24 (Bates Port Authority 041408).

<sup>74</sup> Remand Tr. Vol. 9 at 2386:3-6.

Next Mr. Schaefer “looked” at the SUNTANS modeling – which was prepared for the first hearing and not redone with the new application information. This is the model that capped each cell’s salinity increase at 1% above ambient cell salinity, that schematized the ship channel very differently from the actual geometry of the channel, and for which “it is not possible to develop quantitative metrics for assessing the SUNTANS model’s performance,”<sup>75</sup> i.e., to validate its results quantitatively. Dr. Furnans formed the qualitative opinion that the SUNTANS model “may over predict actual bay salinity,”<sup>76</sup> but this is the same authority who was willing to opine on salt-flux ratios on the basis of another model that has been proven unreliable. The input used for calculating the salt-mass flux through the diffuser was not “potentially” wrong; it was verifiably wrong by a factor of 10. This is a fact. Clearly, Dr. Furnans’ failure to use the correct data in his analyses – and the failure of the Port or of Dr. Furnans’ colleagues to have used a sound QA/QC check of the data – calls into question Mr. Schaefer’s judgment in trusting the “integrity” of Dr. Furnans’ salt-flux analysis.

Mr. Schaefer also took as relevant and weighty Dr. Furnans’ aforementioned salt-flux analysis. To date, no one has explained how this analysis, even had it been executed correctly, leads to findings regarding salinity gradients or changes in salinity gradients. The PFD diverts attention from the salt-flux-analysis on which Mr. Schaefer relied by shifting the burden from the Port and the agency to Protestants, stating: “no one questioned Dr. Furnans or any other witness about it. Nor did PAC offer other exhibits explaining this error or offering a different analysis.” The fact that PAC did not discover the miscalculation until after live testimony does not mean the Port no longer retains the burden of proof. The Port’s error is clearly in the evidentiary record and means that the salt flux data was wholly unreliable for any purpose.

Further, the ALJs opined, with no record support, that such an increase “does not seem” to result in degradation and “would not necessarily raise the salinity level of the receiving water to an alarming level.”<sup>77</sup> Neither of these is the correct legal standard the Port is required to meet. Lay persons guessing about degradation and the mere possibility that salinity levels would not be raised above “alarming levels” is not sufficient to demonstrate that no degradation has occurred.

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<sup>75</sup> Ex. APP-JF-13 and Ex. APP-JF-1, p.15:7-8. Additionally, there is only one reference point against which to judge the SUNTANS model’s ability to reflect salinity changes over time, and that reference point is not in the Bay but, rather, is in Aransas Pass, almost in the Gulf of Mexico. See, Ex. APP-JF-13, Figure 1 and related text.

<sup>76</sup> Ex. APP-JF-1, p. 15:10-11.

<sup>77</sup> PFD at 51.

It is particularly jarring that, when asked about his antidegradation review, Mr. Schaefer explained that he relied on the information he received from the Port and the ED, but not that received from the protestants, because he relied on the sources that “I know well.”<sup>78</sup> Even when one of those sources had a data error data that resulted in a calculation being off by a factor of 10.

Finally, Mr. Schaefer relied on an input with respect to impacts of the effluent within the ZID and ALMZ – the Port’s WET testing, which used mysid shrimp and inland silverside, although “the evidence demonstrated that red drum are more sensitive than these species, particularly in the early life stages.”<sup>79</sup> Thus for impacts that are closer to the diffuser than the edge of the ALMZ, Mr. Schaefer relied exclusively on something that the PFD says “is not definitive.”<sup>80</sup> And ignored data from Dr. Nielsen, the only expert who tested red drum.

**Weight of the Evidence Review:** The PFD asserts that it was within Mr. Schaefer’s “discretion to *heavily discount* the outlier CORMIX runs” offered by PAC.<sup>81</sup> But that is not what Mr. Schaefer testified to. When asked whether he considered the salinity concentrations projected by PAC’s witnesses, Socolofsky and Osting, he stated unequivocally that he did not consider them and discounted them “to zero.”<sup>82</sup>

The PFD asserts for a second time that Mr. Schaefer “considered Dr. Nielsen’s study” in his weight of the evidence review.<sup>83</sup> In fact he testified at the merits hearing that he *did no such thing*: “and then the additional information that this hearing has brought out has kind of fallen in line like the Nielsen – of course, I didn’t use that in my initial review.”<sup>84</sup> It appears the PFD is approving of a practice where ED witnesses attend the hearing and then backfill their deficient processes and reviews with new information they cherry pick from the merits hearing.

Finally, the PFD states that the unwritten process used by Mr. Schaefer was not “too vague” because he began to explain it but “was cut off . . . the questioning went in a different direction.”<sup>85</sup>

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<sup>78</sup> Remand Tr. Vol. 9 at 2361:20-24.

<sup>79</sup> PFD at 84-85.

<sup>80</sup> PFD at 85.

<sup>81</sup> PFD at 48.

<sup>82</sup> Remand Tr. Vol. 9 at 2361:2-5 & 2361:20-23.

<sup>83</sup> PFD at 48 (there is no citation to the record to support this assertion).

<sup>84</sup> Remand Tr. Vol. 9 at 2385:5-8.

<sup>85</sup> PFD at 49.

The PFD concludes that Mr. Schaefer “did not get the opportunity to finish that discussion.”<sup>86</sup> This is remarkable. The ALJs control the proceeding, not the parties. Again, the ALJs have shifted the responsibility to PAC for things that the law and the process do not place upon PAC. Once Mr. Schaefer’s review was shown lacking, it was the ED’s job to defend the antidegradation review and weight of the evidence “process.” After Mr. Schaefer was “cut off” during cross examination, the ED’s counsel took him on re-direct and elected to not create any record at all of what constitutes an adequate weight of the evidence review.<sup>87</sup>

In conclusion, the PFD contrasts Dr. Wallace’s testimony in the Initial Proceeding with Mr. Schaefer’s testimony on remand. Apparently, it is enough to avoid saying things like I did not have enough time to perform a Tier 2 review, my review was based on my feelings, and doing this work is like looking through a gazing ball<sup>88</sup> - and instead to say that this is “based on rigorous technical reviews.” The inability to actually demonstrate substantive understanding and expertise – as basic as defining the standards to be enforced – is resolved by providing an “optimal range of salinity” (that was wrong) and mentioning evidence that was not actually considered during the review.<sup>89</sup> The antidegradation review was no real review at all, and the decision to rubberstamp it as adequate reflects a desire to simply push this permit along rather than ensure that it satisfied all applicable standards and will be protective of aquatic life. The environment and the people of Texas deserve better.

**C. 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 PFD states that the Corpus Christi Ship Channel (CCSC) plays an important role in sustaining populations of estuarine-dependent marine species and the Port’s proposed discharge site is in a sensitive area.<sup>90</sup> High salinity or saline imbalances can be fatal to aquatic life, particularly the early life stages that will pass through the ZID.<sup>91</sup> It is not possible to simply

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<sup>86</sup> PFD at 49.

<sup>87</sup> Remand Tr. Vol. at 2387-91 (Re-Direct examination of Mr. Schaefer by ED).

<sup>88</sup> PFD at 53.

<sup>89</sup> PFD at 53.

<sup>90</sup> PFD at 84.

<sup>91</sup> PFD at 84.

compare the data on acceptable salinity ranges for aquatic organisms with the predicted salinity concentrations produced by the modeling – because the modeling results are “uncertain.”<sup>92</sup> Are they wrong by a little or a lot? Who knows?

Ignoring the uncertainty caused by the eddy, the PFD concludes that exposure will be no more than “seconds and minutes.”<sup>93</sup> But even if this is wrong, the ALJs appear to believe that the WET testing required by the Draft Permit is an insurance policy. The 24-hour acute testing requires “greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.”<sup>94</sup> To be clear, everyone understands that this requirement means the Facility could operate for months, degrading water quality and causing significant lethality, before the testing would reveal that. But if we actually care about the potential harm, we do not need to wait.

While the Port may have been reasonable for using standard species in its WET testing, we know that red drum are more sensitive than those species, particularly in the early life stages.<sup>95</sup> The only person to test red drum larvae, and the only person to test for the impacts of a salinity concentration of 100 percent effluent (as required by the Draft Permit), is Dr. Nielsen. Her LT50 testing showed that larvae spawned at 28 ppt began dying after only 4 minutes, and half were dead after 48 minutes.<sup>96</sup> For larvae spawned at 35 ppt, they began dying after 10 minutes, and half were dead after 55.4 minutes.<sup>97</sup> The ALJs found that testing reliable.<sup>98</sup> So, while we do not have comparable results for the Port’s test species (because it only tested salinities up to 55 ppt) – the Facility would clearly “fail” the required 24-hour acute test if red drum were used. We know that. Today. The Port has not carried its burden on Issue A.

Experts for both the Port and PAC relied on the TPWD study and the PFD discussed it in considerable detail.<sup>99</sup> So let us examine the TPWD paper vis-à-vis the Draft Permit’s requirements for acute testing. In the TPWD study, red drum larvae of different ages, ranging from 1-day to 9-days, were subjected to 18-hour salinity tolerance tests with concentrations ranging from 0 ppt to

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<sup>92</sup> PFD at 39.

<sup>93</sup> PFD at 88.

<sup>94</sup> Admin Record Tab K at Page 31 (Bates 00031).

<sup>95</sup> PFD at 85.

<sup>96</sup> PFD at 59-60.

<sup>97</sup> PFD at 60.

<sup>98</sup> PFD at 86.

<sup>99</sup> This is also called the “Thomas” study. Ex. PAC-85R; PFD at 63, 67, 72, 86.

50 ppt.<sup>100</sup> For every age, mortality was much greater than 50% at 48 ppt. Thus, the TPWD study showed that salinity far less than required for the Draft Permit’s acute testing, killed far more than half the subjects, well before the 24 hour mark. The “best” result at 50 ppt was for 5-day old red drum, with a 4.76% survival rate.<sup>101</sup> We do not need to look into a gazing ball. We have the data that tells us what the WET test results would be, if it were performed competently, using red drum. We know that. Today. The Port has not carried its burden on Issue A.

The PFD acknowledges these facts in a rather understated way: “the evidence shows that some mortality could occur due to abrupt changes.”<sup>102</sup> Mr. Schaefer relied on the TPWD study for his “optimal salinity level.” Dr. Fontenot relied heavily on the TPWD study for his Effects Assessment Exhibits – he relied on that study exclusively for the salinity tolerance range of red drum larvae in Exhibit EFA 1-1. Yet there is no analysis at all nor any attempt to explain how mortality of more than 95% for all ages of red drum larvae<sup>103</sup> exposed to 50 ppt in the 18-hour test would not be “significant lethality.”

Ultimately the ALJs concluded that the preponderance of the evidence does not demonstrate the Draft Permit would ensure compliance with the TSWQS.<sup>104</sup> To remedy this failure, the ALJs propose a limit on salinity.<sup>105</sup> The ALJs note that “[t]he question is what limit is appropriate.”<sup>106</sup> To arrive at their recommendation, the ALJs survey the parties’ various proposals.

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

PAC and the Kings/Steves did propose a salinity limit of 2.0 ppt at 100 meters. However, this was only one of many suggestions intended to all work together in tandem to provide

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<sup>100</sup> EX PAC-85R at 62, Table 12 (Bates Port Authority 041399).

<sup>101</sup> EX PAC-85R at 62, Table 12 (Bates Port Authority 041399).

<sup>102</sup> PFD at 89.

<sup>103</sup> That is 100% for larvae age 1-day, 3-days, and 9-days.

<sup>104</sup> PFD at 89.

<sup>105</sup> PFD at 89.

<sup>106</sup> PFD at 90.

protection to creatures within 100 meters of the discharge. The PFD has found numerous deficiencies and uncertainties – for example, regarding the eddy and the modeling, among others – and proclaims that they are all remedied with a salinity limit. But this one additional term, in isolation, does nothing to make the Draft Permit more protective within 100 meters, within the ZID where marine organisms will contact 100% effluent. Moreover, the Port Authority admits, and PFD acknowledges, that the Facility does not meet this standard for 50% recovery and the 95<sup>th</sup> percentile salinity.<sup>107</sup>

Because the Port has failed to meet its burden to prove the Draft Permit would satisfy the TSWQS – because there will be adverse impacts on the marine environment and aquatic organisms – the Draft Permit should be denied. If, over these objections, the Draft Permit is approved, it can only be issued if it includes the ALJs’ recommended salinity limits.

**D. Whether the Proposed Discharge will Adversely Impact Recreational Activities, Commercial Fishing, or Fisheries in Corpus Christi Bay and the Ship Channel (Issue C).**

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

Scott Holt testified (as did others) that during spawning, there are 100 red drum larvae per 100 cubic meters of water.<sup>108</sup> The TPWD study leads to a reasonable inference that there could be virtually 100% mortality to red drum larvae exposed to 50 ppt or greater. Thus the preponderance of the evidence shows there will be significant mortality within the ZID, and due to the importance of the CCSC in the life cycle of the red drum and other estuarine dependent species, that mortality will have a material and lasting impact on the recreational and commercial fishing stock within a few years.

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<sup>107</sup> PFD at 90.

<sup>108</sup> Ex. PAC-4R at 13:20-23.

**E. Whether the Application, and Representations Contained therein, are Complete and Accurate (Issue D).**

This matter was remanded for the ALJs to take additional evidence on (1) whether the Application, and representations contained therein, are complete and accurate, and (2) depth of the channel, site-specific ambient velocity, and the depth of the diffuser. On this referred Issue, here is what the Original PFD said:

Protestants and OPIC contend that the Application inaccurately identifies the channel depth at the outfall location as 63 feet, when the actual depth is closer to 90 feet. The channel depth is an input to the CORMIX model, so this issue is discussed above in connection with Issue G. For the reasons discussed there, the ALJs conclude that the channel depth provided in the Application is not accurate.<sup>109</sup>

At the time that was written, everyone understood and agreed that “the channel depth at the outfall location” actually meant the channel depth at the location where the Applicant told the world it intended to install the outfall. But on remand that simple, basic concept has been turned on its head.

This case is chock full of expert hypotheses and opinions on many topics. One definition for “opinion” is “belief stronger than impression and less strong than positive knowledge.”<sup>110</sup> Two well informed, reasonable, and rational people can hold different opinions on the same subject. Or as U.S. Senator Daniel Moynihan said, “Everyone is entitled to his own opinion, but not his own facts.” Senator Moynihan was never a Protestant at the TCEQ.

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

ED witness Katie Cunningham described the problem on remand clearly and succinctly in her testimony. The June 24, 2021 memo from Dr. Tischler states that the depth at the discharge location is approximately 90 feet. But the depth of the diffuser barrel, as depicted in the bathymetry map included with that memo, is 65 feet.<sup>111</sup>

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<sup>109</sup> Feb. 5, 2021 PFD at 78.

<sup>110</sup> Merriam Webster, <https://www.merriam-webster.com/dictionary/opinion>.

<sup>111</sup> PFD at 96; Ex ED-KC-1 Remand at 0008.

But instead of saying, again – 65 feet is not 90 feet – the PFD provides that “both the ED and the Port Authority agree that the outfall will discharge 64 or 65 feet below the surface and would be within 68 to 70 feet of water on four-to-six foot risers.”<sup>112</sup> That still contradicts the Figure 1 bathymetry map submitted with the New Application.<sup>113</sup> That map shows the Proposed Discharge Location at a spot between two depths: 65.0 and 63.4 feet. Depths of 68 and 70 feet are not reflected anywhere near that proposed location. But now we have a new standard. Correct and verifiable facts need not actually be contained in the Application and supported with data. The Applicant and ED only need to agree – “that the world is flat, that the moon is made of green cheese, or that the Earth is the center of the solar system.”<sup>114</sup>

The PFD tells us that now the ALJs agree that the diffuser barrel will be put in an area within 68 to 70 feet depth<sup>115</sup> – and also that “this area will be in front of the 90-foot depression.”<sup>116</sup> The bathymetry map does not actually show a 90 foot depth anywhere. According to the Port’s bathymetry map, “this area will be in front of” depths of 81.7 feet, 95.1 feet, 88.2 feet, 68.0 feet, and 60.7 feet. Why aren’t any of those the “correct” depth? Apparently because the Port and ED “agree” they are not. The effluent will discharge in that southerly direction during the supposedly infrequent and brief slack tides.<sup>117</sup> The effluent will flow east and west during much more frequent incoming and outgoing tides, and depths in those directions range from 45.5 feet to 78.3 feet. Why aren’t any of those the “correct” depth? Apparently because the Port and ED simply “agree” they are not.

How were Protestants and their experts to know the “correct” depth when they conducted their modeling? Apparently, they weren’t. They had to sit tight for the big reveal, when the Port submitted rebuttal testimony. This really begs the question – why “require” the Application to be correct, or have a hearing at all if the Applicant and ED can simply “agree” to a set of facts that contradict the facts contained in the Application and supporting materials? And that also contradict the facts presented in written discovery and depositions. One thing is very clear: the location of

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<sup>112</sup> PFD at 97.

<sup>113</sup> PFD at 97; AR-R 4 Admin Record – Remand Tab I at Figure 1 Diffuser Location (Bates 00254).

<sup>114</sup> *E.I. du Pont de Nemours & Co. v. Robinson*, 923 S.W.2d 549, 558 (Tex. 1995).

<sup>115</sup> PFD at 97.

<sup>116</sup> PFD at 97.

<sup>117</sup> PFD at 70.

the discharge has been identified as 90 feet in the Application, yet now everyone agrees it is actually in a location where the depth is somewhere between 65 and 70 feet. This is a fact. The New Application is wrong. Yet, apparently facts do not matter and one of the reasons the Commission remanded to the ALJs has now been disregarded as irrelevant.

**F. Whether the Draft Permit Includes All Appropriate and Necessary Requirements (Issue I).**

On this referred Issue, here is what the Original PFD said:

The ALJs conclude that the draft permit does not include all appropriate and necessary requirements. As discussed in other sections of the PFD, the Port Authority has failed to meet its burden of proof to show that the CORMIX modeling is reliable and used accurate inputs, that the ED's antidegradation review was accurate, and that the proposed discharge will not adversely affect the marine environment, aquatic life, wildlife, recreational activities, commercial fishing, and fisheries.<sup>118</sup>

These exact same issues are at play on remand. "For the channel depth, CORMIX's conservative module requires the modeler to select a single value and is not capable of modeling a depression or hole, such as exists near the proposed discharge site."<sup>119</sup> In the Initial Proceeding, failure to use accurate inputs for CORMIX modeling was fatal. On remand, the Port was permitted to arbitrarily select a depth of channel and depth of diffuser that contradict the New Application and supporting materials in the Administrative Record.

In the Initial Proceeding, simply following the Commission's IPs for an antidegradation review was "not sufficient on its own to ensure that the proposed discharge complies with the substantive antidegradation standards."<sup>120</sup> On remand, it is apparently good enough, even though the analysis relied on salt mass flux calculations that contain mathematical errors that are off by a factor of ten,<sup>121</sup> was done by someone who cannot even define the key terms necessary for the analysis,<sup>122</sup> and was done according to an unwritten and undefined process.<sup>123</sup> Again, it appears

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<sup>118</sup> Feb. 5, 2021 PFD at 83.

<sup>119</sup> PFD at 36.

<sup>120</sup> Feb. 5, 2021 PFD at 39.

<sup>121</sup> PFD at 42, 50.

<sup>122</sup> PFD at 46.

<sup>123</sup> PFD at 48-49.

the ALJs simply 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.

As for whether the proposed discharge will adversely affect the environment and organisms, much of the ALJs' analysis in the original PFD is still 100% accurate and true today on remand.<sup>124</sup> Just one brief example is illustrative:

. . . a key issue in this case is that the TSWQS do not contain numeric criteria for salinity. As a result, effluent testing does not address the concerns about salinity. Furthermore, even if there were numeric criteria for salinity, given the discharge location's pivotal role in the life cycle of estuarine-dependent species and the sensitivity of early life stages to salinity changes, waiting to identify significant problems until after the discharge commences is not sufficient.

The draft permit also requires the Port Authority to conduct WET testing during the first year of the discharge. However, this requirement also applies after the discharge commences and is not sufficient for the same reason. In addition, the draft permit does not require testing of salinity impacts on larval stages of fish, which is the primary aquatic life concern raised by PAC's witnesses.<sup>125</sup>

How does that hold up on remand? The PFD states that red drum are more sensitive than the standard WET test species.<sup>126</sup> So WET testing "may not be representative of the impacts on more sensitive species or earlier life stages."<sup>127</sup> The PFD includes findings that red drum is a reasonable surrogate for evaluating potential adverse impacts of the proposed discharge; red drum eggs and larvae are more sensitive to salinity changes, especially 3- to 5-day old larvae; and early life stage red drum, including 3- to 5-day-old larvae, will pass through the ZID and mixing zones.<sup>128</sup> Thus, the ALJs recognize the importance of red drum as a surrogate species for the potential impacts on aquatic life.

But, as the Port's own witness acknowledged, with respect to the WET testing required by the Draft Permit, the EPA standard test methods included in the Draft Permit "don't make sense in this context where the constituent of concern is salinity,"<sup>129</sup> and they do not call for test subjects

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<sup>124</sup> Feb. 5, 2021 PFD at 62-68.

<sup>125</sup> Feb. 5, 2021 PFD at 68.

<sup>126</sup> PFD at 85.

<sup>127</sup> PFD at 85.

<sup>128</sup> Finding of Fact Nos. 91, 92, 93, 94.

<sup>129</sup> Remand Tr. Vol. 4 at 827:21-25.

younger than 7-days old.<sup>130</sup> Despite this, and the ALJs' prior conclusions about the inadequacy of WET testing, the ALJs basically found that WET testing the Draft Permit (1) helped to salvage Mr. Schaefer's antidegradation review,<sup>131</sup> and (2) resolved the impossibility of predicting real world exposure times.<sup>132</sup> Apparently, on remand, "waiting to identify significant problems until after the discharge commences" is ok, even though it was not in the original PFD.

Because the recommendations in the PFD – a salinity limit, mixing limits in the ALMZ and HHMZ, and monitoring requirement – are insufficient to remedy the many ways in which the Port has failed to satisfy its burden, and are insufficient to make the New Draft Permit protective, the New Draft Permit should not be issued. In the alternative, if the New Draft Permit is issued, it absolutely must contain these recommendations.

#### **G. PAC Should Not Bear Any Transcript Fees.**

Finally, as discussed above, the Port completely changed its application on remand, making this not a remand for the gathering of additional evidence on the original application and draft permit, but an entirely new application. As such, this remand proceeding bears no resemblance to the original proceeding and the original application and draft permit considered in the Initial Proceeding. Accordingly, if the Commission chooses to grant the new Draft Permit, no costs from the Initial Proceeding should be ordered apportioned at this time because this new Draft Permit and any order granting it will have no relationship to the Initial Proceeding. Moreover, PAC should not be forced to bear any costs associated with an application that was effectively withdrawn. By completely amending its application and changing its discharge location, the Port has recognized that its prior application was inadequate and was never the proper basis for a draft permit that could have been granted. PAC should not have to bear costs associated with the Port's own errors and failings.

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<sup>130</sup> Remand Tr. Vol. 4 at 922:18-923:18.

<sup>131</sup> PDF at 43.

<sup>132</sup> PDF at 88.

#### IV. EXCEPTIONS TO SPECIFIC FINDINGS AND CONCLUSIONS

##### A. Specific Exceptions to Findings of Fact

Protestants except to the following identified findings of fact presented by the ALJs in the proposed order submitted to the Commission, and move that they be replaced with the language proposed below for each listed finding (or stricken, as noted in places, for the reasons set out):

**Finding of Fact No. 53:** Due to the need for schematization, some professional judgment will be necessary when selecting the inputs to the CORMIX model.

**Finding of Fact No. 55:** The depth of the channel at the outfall location is approximately 65 feet.

**Finding of Fact No. 56:** Using a 90-foot depth was inaccurate.

**Finding of Fact No. 59:** The ED's use of 229 feet for DISTB in the CORMIX modeling was materially inaccurate.

**Finding of Fact No. 60:** The CORMIX user Manual recommends that the Brine module in CORMIX be run for all brine discharges.

**Finding of Fact No. 62:** The potential for an eddy to form occasionally near the proposed discharge site means that its movement could trap organisms and lengthen exposure times.

**Finding of Fact No. 63:** The presence of two outcroppings extending from the shoreline, and the 90-foot depression, introduce some uncertainty into the modeling results, rendering them unreliable.

**Finding of Fact No. 65:** CORMIX's 50% margin of error renders the modeling results unreliable.

**Finding of Fact No. 67:** The ED's CORMIX modeling inputs are materially inaccurate.

**Finding of Fact No. 68:** The ED's CORMIX modeling is not sufficient to ensure the Revised Draft Permit is protective of water quality.

**Finding of Fact No. 69:** The Port Authority relied on the SUNTANS modeling it conducted for the Original Application, without revision or updating.

**Finding of Fact No. 70:** The SUNTANS modeling included a calculation for salt mass flux and an input for that calculation included an error that is incorrect by approximately a factor of ten.

**Finding of Fact No. 77:** Mr. Schaefer used a Texas Water Development Board paper to determine the optimal salinity level of red drum for his review; however he misunderstood or misstated the findings in that paper. He also testified that he did not examine salinity toxicity testing by PAC witness Dr. Kristin Nielsen.

**Finding of Fact No. 78:** The ED's antidegradation review does not demonstrate that the proposed discharge will maintain existing uses and not lower water quality by more than a de minimis amount.

**Finding of Fact No. 83:** Organisms entering the Aransas Pass inlet have three alternate pathways to travel to the estuaries: Corpus Christi Ship Channel, Lydia Ann Channel, and Aransas Channel. Approximately 20% to 70% of larvae are estimated to use the Corpus Christi Ship Channel for this journey.

**Finding of Fact No. 96:** Exposure times will be longest during slack tide conditions, but the actual exposure times are impossible to determine.

**Finding of Fact No. 97:** STRIKE. This finding should be stricken, as the evidence is insufficient to establish this finding.

**Finding of Fact No. 103:** The careful consideration required for evaluating the impacts of a discharge of salinity was not performed.

**Finding of Fact No. 104:** With the addition of a salinity limit in the Revised Draft Permit, the adverse impact on the marine environment, aquatic life, and wildlife, including spawning eggs and larval migration will be reduced, but not eliminated.

**Finding of Fact No. 106:** Because the proposed discharge will adversely impact aquatic life, there will be cascading effects on aquatic-dependent species, including birds.

**Finding of Fact Nos. 107:** The proposed discharge will adversely impact birds and endangered or threatened species.

**Finding of Fact Nos. 111:** Because the proposed discharge will adversely impact aquatic life, there will be cascading effects on recreational and commercial fishing, or fisheries.

**Finding of Fact Nos. 112:** The proposed discharge will adversely impact recreational activities, commercial fishing, and fisheries in Corpus Christi Bay and the ship channel.

**Finding of Fact No. 116:** The Revised Application did not have a sponsoring witness at the Remand Hearing.

**Finding of Fact No. 117:** The Revised Application and supporting documentation did not correctly identify the locations of the proposed outfall or depth of the channel at the outfall location.

**Finding of Fact No. 118:** STRIKE. This finding should be stricken, as the evidence is insufficient to establish this finding.

**Finding of Fact No. 120:** Whether the Facility is properly characterized as a minor or major facility does affect whether the ED's antidegradation review was accurate and whether the Draft Permit includes all appropriate and necessary requirements.

**Finding of Fact No. 121:** The Application failed to provide information about the effluent as required by 30 TAC § 305.45(a)(8)(B)(ii) which requires that the application include information on the chemicals or characteristics of the chemicals that can be expected to be in the

discharge “described in enough detail to allow evaluation of the water and environmental quality considerations involved; ...”

**Finding of Fact Nos. 125, 126:** STRIKE. Because the Applicant submitted a New Application, new notice was required but was not provided.

**Finding of Fact No. 135:** STRIKE. The Port should bear all costs of transcribing this proceeding, including all costs from the original hearing, and should not be entitled to reimbursement from any other parties.

**B. Specific Exceptions to Conclusions of Law.**

Protestants except to the following identified conclusions of law presented by the ALJs in the proposed order submitted to the Commission, and move that they be replaced with the language proposed below for each listed conclusion (or stricken, as noted in places, for the reasons set out):

**Conclusion of Law No. 4:** Notice of the Original Application and the Initial Proceeding were properly provided to the public and to all parties. Tex. Water Code §§ 5.115, 26.022, 26.028; Tex. Gov’t Code §§ 2001.051-052; 20 Tex. Admin. Code ch. 39. Notice of the New Application and hearing thereon were not properly provided.

**Conclusion of Law No. 11:** There must be no lethality to aquatic organisms that move through a ZID. 30 Tex. Admin. Code §§ 307.6(c)(6), 307.8(b)(2).

**Conclusion of Law No. 17:** The ED’s antidegradation review does not ensure compliance with the Tier 1 and Tier 2 antidegradation standards. 30 Tex. Admin. Code § 307.5(b).

**Conclusion of Law No. 18:** The ED’s modeling analysis of the proposed discharge is not sufficient to ensure the Revised Draft Permit is protective of water quality.

**Conclusion of Law No. 21:** With the additional permit requirements described in Finding of Fact No. 122, the Revised Draft Permit is more protective but still does not include all

appropriate and necessary requirements to protect the marine environment, aquatic life, wildlife, recreational activities, commercial fishing, and fisheries.

**Conclusion of Law No. 22:** With the additional permit requirements described in Finding of Fact No. 122, the Revised Draft Permit is more protective of water quality and the uses of the receiving waters but still does not satisfy the applicable TSWQS. 30 Tex. Admin. Code ch. 307.

**Conclusion of Law No. 25:** The Port Authority substantially complied with all applicable notice requirements for the Original Application but not for a substantially “new” Application. 30 Tex. Admin. Code ch. 39.

**Conclusion of Law No. 28:** The Port should bear all costs of transcribing this proceeding, including all costs from the original hearing, and should not be entitled to reimbursement from any other parties.

**C. Specific Exceptions to Proposed Ordering Provisions.**

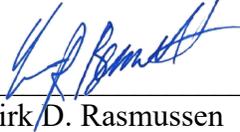
Protestants except to the following identified proposed ordering provisions presented by the ALJs in the proposed order submitted to the Commission, and move that they be replaced with the language proposed below for each listed provision:

1. The Revised Application of the Port of Corpus Christi Authority of Nueces County for Texas Pollutant Discharge Elimination System Permit No. WQ0052530001 is denied.
2. The Port Authority shall pay all transcription costs for these proceedings.

**V. CONCLUSION**

**WHEREFORE, PREMISES CONSIDERED,** Protestants respectfully request that the TCEQ deny the Port’s permit application, because such fails to demonstrate that the facility to be operated will be protective of public health and the environment. Further, Protestants request such other and further relief to which Protestants may show themselves justly entitled.

Respectfully submitted,



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**ATTORNEYS FOR PORT ARANSAS  
CONSERVANCY**

**CERTIFICATE OF SERVICE**

I certify that a copy of this document was served on all parties of record on this date, July 11, 2022, in accordance with the applicable service procedures.



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Craig R. Bennett

# EXHIBIT A

CERTIFIED COPY

VIDEO TRANSCRIPTION OF  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
MAY 19, 2021

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5 JON NIERMANN  
6 CHAIR

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7 ERNEST WOTRING  
8 BAKER WOTRING LLP

8

9 EMILY LINDLEY  
10 COMMISSIONER

10

11 BOBBY JANECKA  
12 COMMISSIONER

12

13 CRAIG BENNETT  
14 LAW FIRM OF JACKSON WALKER

14

15 UNIDENTIFIED FEMALE SPEAKER

16

17 REPRESENTATIVE COOK

18

19 KATHY HUMPHREYS  
20 ENVIRONMENTAL LAW DIVISION

19

21 PETER SCHAEFER  
22 WATER QUALITY DIVISION

21

22 UNIDENTIFIED MALE SPEAKER

23

24

25

1 VIDEO TRANSCRIPTION OF  
2 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
3 MAY 19, 2021

4 MS. SMITH: Item Number Two is the  
5 consideration of the ALJ's proposal for a decision,  
6 and proposed order concerning the application of the  
7 Port of Corpus Christi Authority of Nueces County, for  
8 TPDES Permit Number WQ0005253000, to discharge treated  
9 effluent from a proposed marine desalination plant.  
10 The order of presentation should begin with the  
11 applicant, followed by protestants, the ED, and then  
12 OPIC.

13 By letter dated April 30th, 2021, the Chief  
14 Clerk's Office, at the request of the Office of  
15 General Counsel notified the parties that they will  
16 each have the following oral argument time. Applicant  
17 will have 12 minutes. Protestants will have 12  
18 minutes, collectively. The ED will have eight  
19 minutes, and OPIC will have eight minutes. The  
20 applicant may save time for rebuttal, as it bears the  
21 burden of proof on this application.

22 CHAIR NIERMANN: Thank you, Ms. Smith. And  
23 I'll ask the representatives for the applicant to go  
24 ahead and identify themselves for the record. And  
25 then, the floor is yours.

1 ERNEST WOTRING: Yes, good morning. My name is  
2 Ernest Wotring, of the Law Firm of Baker Wotring. And  
3 I will be presenting argument on behalf of the Port  
4 Authority of Corpus Christi on Item Number Two on  
5 today's agenda, for the Commissioners.

6 Port Authority represents the interests of the  
7 over 400,000 residents of Nueces and San Patricio  
8 Counties, the City of Corpus Christi, and other local  
9 governments in the surrounding region. Port Authority  
10 is required to develop port related industries that  
11 advance the economies of Nueces and San Patricio  
12 Counties, and its efforts have attracted billions of  
13 dollars of private capital to the region, built a tax  
14 base of all local taxing authorities, and created  
15 employment opportunities for thousands of South Texans  
16 over several generations.

17 To further promote a healthy local environment  
18 while ensuring protection of the environment, Port  
19 Authority is seeking a TPDES permit for a proposed  
20 seawater desalinization facility. The proposed  
21 desalinization facility will bring potable water to  
22 the Nueces and San Patricio Counties that have  
23 suffered repeated, severe drought conditions, posing  
24 imminent threats of disaster to the public's health,  
25 property, and the economy in the region.

1           The Port Authority supports the Executive  
2 Director's motion to remand this matter so that it can  
3 provide additional evidence in support of the draft  
4 permit. The Texas Legislature has expressed the  
5 importance of desalination for the future of the  
6 state. As the Texas Legislature has stated, 'With  
7 this state facing an ongoing drought, continuing  
8 population growth, and the need to remain economically  
9 competitive, every effort must be made to secure and  
10 develop clinical and cost effective water supply to  
11 meet the ever increasing demands for water.'

12           The pressing need for new sources of potable  
13 water, and the evidence in the record regarding the  
14 draft permit make a compelling case to grant the  
15 Executive Director's motion to remand.

16           The record shows that the discharged from the  
17 proposed desalinization facility will not  
18 significantly increase the salinity in the Corpus  
19 Christi Ship Channel. At most, any increase of  
20 salinity will be less than 1%. In addition, the  
21 volume of the discharge will only be, at most, .5% of  
22 the daily tidal exchange flow in the Channel. The  
23 natural salinity in the Corpus Christi Ship Channel  
24 varies significantly throughout the year, from 39  
25 parts per thousand at the highest, to 18 parts per

1 thousand at the lowest. So the discharge will have a  
2 smaller impact than the natural occurring increase and  
3 decrease in salinity, which is far more variable and  
4 extreme than the proposed discharge into the Corpus  
5 Christi Ship Channel from the facility.

6 ALJs identified issues with the modeling from  
7 the facility's discharge as being inaccurate. 1) The  
8 depth of the channel of the discharge into the  
9 ambulant velocity of the water where the outfall is  
10 located. The Executive Director has requested that  
11 the Commissioners order the ALJs to reopen the  
12 evidence so additional modeling can be performed with  
13 updated inputs to address the concerns expressed by  
14 the ALJs. Port Authority supports the Executive  
15 Director's request of the remand, to respond to the  
16 issues in the modeling that were raised in the  
17 contested case process, and to provide additional  
18 evidence that the depth of the Channel, and other  
19 issues demonstrate that the proposed permit is  
20 protective of the environment, and marine life. Port  
21 Authority supports this request to remand, as it has  
22 supported other additional measures in connection with  
23 the draft permit, to respond to the TCEQ's inquiries,  
24 and to answer legitimate concerns about the proposed  
25 facility.

1           And the Texas Park - Department of Parks and  
2 Wildlife raised concerns about the possible impacts of  
3 the discharge, and requested whole effluent toxicity  
4 testing, also known as WET testing. Port Authority  
5 voluntarily agreed to add to the, the WET testing, the  
6 firmest requirements, to confirm that the discharge  
7 would not be harmful to marine life. Port Authority  
8 has agreed to chemical analysis of the outfall within  
9 60 days of the initial discharge, for 71 toxic  
10 pollutants listed in the Texas Surface Water Quality  
11 Standards.

12           On remand, the Port Authority will provide  
13 additional modeling information, and work with the  
14 staff of the TCEQ to supply additional data that it  
15 believes will confirm the testimony of the Port  
16 Authority's expert witnesses, and TCEQ's witnesses,  
17 that the outfall from the facility meets the Texas  
18 Surface Water Quality Standards, and is protective of  
19 aquatic life in the marine environment.

20           Under 30 TAC Section 80.265, on the motion of  
21 any party, or on a motion - on, on its own motion, the  
22 Commission may reopen the record for further  
23 proceedings on the specific issues in dispute.

24           Case at hand is exactly the type of situation  
25 that that section was intended to address. Reopening

1 the evidence on the modeling issue is appropriate  
2 because it will allow the concerns of the ALJs to be  
3 addressed, and the permit application reevaluated,  
4 with a relatively small amount of additional work when  
5 compared to the time and effort that has already been  
6 expended. The remand will avoid the waste of the  
7 significant public resources that have already been  
8 invested in seeking to obtain this TPDES permit, and  
9 the remand will avoid a significant delay in obtaining  
10 potable water.

11 In prior briefings, arguments were raised that  
12 the remand should be not granted because it would be  
13 unfair, or inequitable to do so. In fact, the  
14 equities favor the Port Authority's efforts to obtain  
15 fresh, clean drinking water for the residents,  
16 community, and the region where it serves. The Port  
17 Authority is attempting to follow the instructions  
18 from the Texas Legislature that every effort must be  
19 made to secure and develop plentiful, and cost  
20 effective water supply to meet the ever increasing  
21 demands for water, and that in this state, marine  
22 seawater is a potential new source of water for  
23 drinking, and other beneficial uses.

24 The Texas Legislature said that equities could  
25 apply to this contested case hearing, and the motion

1 to remain, and those equities fall squarely in favor  
2 of granting the Executive Director's motion to remand,  
3 to permit the Port Authority to continue its efforts  
4 to ensure that necessary water supplies are made  
5 available to the people, and industry the Port serves.  
6 Equities do not support denying the motion so that  
7 efforts to obtain plentiful and cost effective water  
8 supply are delayed, perhaps for years.

9 Protestants have argued that the expense of  
10 this matter is a burden on taxpayers and the TCEQ.  
11 Protestants' concerns about the taxpayers' expense  
12 ring hollow. Those who oppose the remand have made it  
13 clear in public statements that they will oppose any  
14 and all of the Port Authority's projects, and  
15 development in the Corpus Christi Ship Channel.

16 TCEQ Executive Director and the Port Authority  
17 make this request for remand because doing so is the  
18 most efficient path forward for the public good, as  
19 defined by the Texas Legislature. The Port Authority  
20 of Corpus Christi respectfully request the  
21 Commissioners grant the Executive Director's motion to  
22 remand this matter, to take additional evidence  
23 regarding the depth, modeling, and other referred  
24 issues that rely on the model.

25 CHAIR NIERMANN: Thank you --

1 MR. WOTRING: Thank you.

2 CHAIR NIERMANN: -- Mr. Wotring. And do I  
3 understand that you're going to reserve the remainder  
4 of your time for rebuttal?

5 MR. WOTRING: That's correct.

6 CHAIR NIERMANN: Thank you. Colleagues, I, I'm  
7 directing a little, a little traffic here. We have  
8 Representative Tinderholt available to address the  
9 Commission on Old Business One, and since he has a  
10 difficult schedule, I want to try to accommodate him.  
11 So let's pause here, and we'll have Counsel, our  
12 General Counsel call the caption for Old Business One;  
13 we'll hear from the Representative, then we'll return  
14 to this Item Two, and take that opportunity to pose  
15 any questions that we may have for Mr. Wotring at, at  
16 this point. Ms. Smith, would you call Old Business  
17 One, and we'll give the Representative an opportunity  
18 to, to speak?

19 (SKIP TO 23:26 - PROPOSAL FOR DECISION, ITEM 2)

20 CHAIR NIERMANN: Let's return to Item Two. Mr.  
21 Wotring, I'm sorry to - I'm glad you were able to  
22 finish your, your presentation. Let me check in to  
23 see if either of my colleagues have any questions for  
24 you at this point. I do not. Commissioner Lindley,  
25 any questions for Mr. Wotring?

1 COMMISSIONER LINDLEY: I do not. Thank you.

2 CHAIR NIERMANN: Mr. Janecka?

3 COMMISSIONER JANECKA: Likewise - I don't at  
4 this time. Thanks.

5 CHAIR NIERMANN: Okay. All right. Let's pause  
6 there. Representative Cook, are you on the line? All  
7 right. On Item Two, let's, let's take the  
8 protestants' presentation at this point. Mr. Bennett,  
9 are you there, Sir?

10 MR. BENNETT: Yes. I'm here. Can you hear me  
11 okay?

12 CHAIR NIERMANN: Loud and clear. Thank you.

13 MR. BENNETT: Okay.

14 CHAIR NIERMANN: Go ahead when you're ready.

15 MR. BENNETT: Okay. Thank you. Good morning,  
16 Mr. Chairman, Commissioners, General Counsel. My name  
17 is Craig Bennett. I'm with the Law Firm of Jackson  
18 Walker, and I represent the Port Aransas Conservancy,  
19 one of the protestants in this case.

20 So I know every case is difficult, but I  
21 believe the decision here is clear. This is not a  
22 case where landowners are simply asserting 'not in my  
23 backyard' complaints, or where the applicant failed to  
24 comply with a small technical detail. No, this is a  
25 case where the leading aquatic life experts agree that

1 the site of this proposed discharge is a terrible  
2 idea. These scientists from the University of Texas  
3 Marine Science Institute, and Texas A & M Corpus  
4 Christi, testified that the proposed location for the  
5 discharge from this desalination facility is the worst  
6 possible place to put it along the Texas coast. Not  
7 one, but two administrative law judges recognized the  
8 potential harm from this facility, and they have  
9 recommended that this permit be denied. Those judges  
10 agree with the protestants on six of the nine referred  
11 issues - not just one or two issues, but on six of the  
12 nine referred issues, the judges found against the  
13 Port. Your own Executive Director also now agrees  
14 that this permit cannot be issued on the record before  
15 you.

16 So really, the only question before you now is  
17 whether you remand this application, or deny it  
18 outright. I believe the record clearly demonstrates  
19 that you should deny it outright, because the ultimate  
20 problem with this application cannot be fixed on  
21 remand - mainly, the Port would have to move the  
22 discharge location from the Aransas Pass, into the  
23 Gulf of Mexico to alleviate the potential harm from  
24 this facility.

25 Now, the Port already moved the intake location

1 out into the Gulf because of concerns regarding the  
2 impacts on aquatic life. And it would have to also  
3 move the discharge location, as well. Unless it does  
4 that, a remand does absolutely nothing to fix the  
5 biggest problem with this application.

6 Now, just a few years ago, in the Altair case,  
7 which is Docket Number 2018-00-13-IHW, the Executive  
8 Director recommended a remand. But you recognized  
9 that a remand was not appropriate in similar  
10 circumstance, and you denied the permit outright. You  
11 should do the same today.

12 This case reminds me of an electric  
13 transmission utility line case from a few years ago,  
14 in which an electric utility wanted to place a  
15 transmission line across a portion of Palo Duro  
16 Canyon. Now, the Public Utility Commission rejected  
17 that proposal, of course, because it was a terrible  
18 idea to have a transmission line across one of our  
19 valued state treasures.

20 Similarly, the Port's proposal here is a  
21 terrible idea. The Aransas Inlet provides the main  
22 corridor for larvae to get to the spawning grounds in  
23 the Gulf, to nursery grounds in the Inner Bay. And  
24 the Port wants to discharge hyper-saline wastewater  
25 containing twice the salt content of the ambient water

1 in the Aransas Pass, directly into the heart of that  
2 corridor.

3 I presented a map showing the location of the  
4 proposed discharge for your benefit, so you can see  
5 exactly what I'm talking about. This location is like  
6 permitting a toxic waste dump on Interstate 35 in  
7 downtown Austin. It's an idea that should be rejected  
8 out of hand. To be clear, though, this case is not  
9 about opposition to desalination plants. Desalination  
10 is a valuable technology, serving a good purpose. But  
11 in seeking the permit of the first desalination plant  
12 in the state, the Port has chosen a horrible location.  
13 It's one that the Director of the Coastal Fisheries  
14 Research Program at the University of Texas Marine  
15 Sciences (unintelligible), quote, "literally the worst  
16 possible location" - end quote.

17 Another expert, Dr. Greg Stunz, the Director of  
18 the Center for Sport Fish Science and Conservation at  
19 the Harte Research Institute at Texas A & M Corpus  
20 Christi, said this about it. Quote, "If I had to  
21 choose the absolute worst location on the Texas coast,  
22 from an ecological perspective, to place a  
23 desalination plant, I would choose Harbor Island in  
24 the Aransas Pass Inlet." End quote. Dr. Stunz went  
25 on to say that, quote, "Discharging 96 million gallons

1 a day into the heart of this ecosystem would, in my  
2 opinion, be catastrophic." End quote. Now,  
3 scientists are not usually prone to hyperbole. And  
4 Dr. Stunz, by the way, is the only witness in this  
5 case with prior experience evaluating the virtues of a  
6 location for a desalination plan. He was hired by the  
7 City of Corpus Christi to perform a (unintelligible)  
8 analysis of such a plan. And he was responsible for  
9 assessing locations for the discharge of brine from  
10 such a plant. He testified that Harbor Island was not  
11 even given serious condition by the City of Corpus  
12 Christi, because there's so many better alternatives  
13 with less adverse impacts.

14 Now, the Texas Parks and Wildlife Department,  
15 and General Land Office issued a report specifically  
16 identifying appropriate locations for desalination  
17 plants on the Texas coast. That report says almost  
18 the entire Texas coast is appropriate - but  
19 specifically excluded five sites, one of which is  
20 exactly where the Port wants to put the plant in this  
21 case. Now, the Port will tell you that report was  
22 prepared for expedited permitting only. But that  
23 misses the point entirely. The whole purpose of the  
24 report was to determine appropriate locations for  
25 desalination activities so the expedited permitting

1 process could be used for those locations.

2 Now, TCEQ's own preamble to its rules, under  
3 Chapter 18, the Texas Water Code, recognized this  
4 purpose, stating, quote, "House Bill 2031 requires the  
5 Texas Parks and Wildlife Department, and the Texas  
6 General Land Office to conduct a study to identify  
7 zones in the Gulf of Mexico that are appropriate for  
8 the diversion of marine seawater and the discharge of  
9 waste resulting from the desalination process." End  
10 quote. Therefore, even you, TCEQ Commissioners, have  
11 recognized the purpose of the report is to determine  
12 appropriate locations for desalination activity.

13 So it is sadly ironic that the Port has chosen  
14 one of the few places excluded by the report for such  
15 activity. Not only that, but the location the Port  
16 has chosen is directly adjacent to the Redfish Bay  
17 State Scientific Area. So not only is it a terrible  
18 location from an aquatic life standpoint, it's also  
19 immediately adjacent to a State Scientific Area. It's  
20 almost as if the Port's criteria was to find the worst  
21 possible place for a desalination plant.

22 Six different experts from a variety of  
23 backgrounds - academics, who studying the marine  
24 environment for a living, researchers, former  
25 regulatory staff of the TCEQ's predecessor - all

1 testified against this permit. These are well  
2 respected scientific minds. They're not consultants  
3 hired to support a specific position. Even before  
4 they were retained by PACC (phonetic), four of these  
5 experts expressed serious concerns about the location  
6 of the proposed facility. They did so not because  
7 they had an ax to grind, or were paid to take a  
8 position - but simply because they are marine  
9 ecologists with years of work studying the systems  
10 involved, and who understand the highly sensitive  
11 ecology in this area.

12 Now, the Port attempts to paint these experts  
13 as biased because of their public comments against  
14 this proposed facility. But to the contrary - those  
15 comments show that these experts actually believe what  
16 they are saying - namely, they understand the harm a  
17 desalination plant presents to the sensitive ecology  
18 in this area, and they, as scientists, cannot stand by  
19 and do nothing, and let a potential ecological  
20 disaster occur.

21 So, knowing that this is a highly sensitive  
22 ecological area, did the Port do a heightened analysis  
23 to ensure the protection of aquatic life? No. Quite  
24 the contrary - this case was referred to SOAH in  
25 December of 2019, on a draft permit the Executive

1 Director was ready to approve. Before SOAH could hold  
2 a preliminary hearing, though, attorneys for Port  
3 Aransas Conservancy took the deposition of the  
4 Executive Director's staff witness, and demonstrated  
5 how the modeling used by the Port and reviewed by the  
6 Executive Director was wrong, and the discharge would  
7 violate the permit. Because of that deposition, the  
8 Executive Director went back and changed the draft  
9 permit. But because staff had no numerical criteria  
10 for evaluating the impact of the concentrated brine,  
11 the Executive Director simply loosened the permit  
12 limit to allow about 10 times more salinity in the  
13 discharge. That is the equivalent of raising the  
14 speed limit to whatever speed you intend to drive,  
15 rather than setting it at a speed determined to be  
16 safe.

17           The change did tighten the permit for many  
18 pollutants, but not salinity, the main constituent in  
19 dispute here. And it's a constituent that could cause  
20 tremendous harm to the marine environment and aquatic  
21 life.

22           Now, this bears repeating. The ED admitted the  
23 modeling error that underpinned its anti-degradation  
24 review (unintelligible) permit limits, and soon also,  
25 the Port also admitted the error. At this point, the

1 public and you would expect that the Executive  
2 Director and the Port would have sought to remand the  
3 application to reevaluate the impact of these  
4 unexpectedly and dramatically high salinity increases.  
5 Instead, the ED simply revised the draft permit limits  
6 to allow worse mixing of the salinity, and greater  
7 risk to larvae and other early life stages of fish and  
8 shellfish. Neither the Executive Director, nor the  
9 Port asked for a remand then, although they clearly  
10 should have, given the modeling errors the draft  
11 permit was based upon.

12 Now, the expert testimony demonstrates that  
13 hyper-salinity is lethal to much of the early life  
14 stages of aquatic life in the area. And this area is  
15 one of the most critical along the Texas coast for  
16 commercial, recreational, and sport fishing,  
17 representing millions of dollars to the Texas economy.  
18 There's no reason to jeopardize that, when there are  
19 so many other places that could be chosen for  
20 desalination activities.

21 Now, the Port argues that the hyper-saline  
22 discharge is of no concern because they claim it  
23 results in just a 1% increase in salinity in the  
24 Corpus Christi Ship Channel. However, that number is  
25 incredibly misleading, because it looks at the broader

1 water body - which, by the way, is a completely  
2 arbitrary selection - rather than the specific area  
3 where the discharge will occur.

4 Now, the discharge will occur in the Aransas  
5 Pass Inlet, which is a critical pathway for the  
6 migration of the earliest forms of hundreds of species  
7 of aquatic life - which literally float on the  
8 currents, and they lack the ability to do anything to  
9 avoid the discharge. In that location, in the zone of  
10 initial dilution and the other mixing zones, the  
11 salinity change is not 1%, but greater than 60% at  
12 times. That's a level that experts say would be  
13 catastrophic to spawning fish populations.

14 Now, I want to briefly turn to the judges'  
15 recommendation, and I want to touch on a couple of  
16 points. The judges here recommended denial because  
17 they found in favor of protestants on six of nine  
18 referred issues - all of the most significant issues.  
19 Among other things, the judges found - 1) The Port has  
20 not shown that the proposed discharge will not  
21 adversely affect the marine environment, aquatic life,  
22 or other wildlife. 2) The Port had not shown that the  
23 proposed discharge will not adversely affect  
24 recreational activity, including commercial fishing  
25 and fisheries. 3) The Port had not shown that the

1 modeling complied with the applicable regulations to  
2 ensure the draft permit is protective of water  
3 quality. And 4) The Executive Director's  
4 antidegradation review is not accurate.

5 Now, ultimately, the Port had argued that the  
6 judges incorrectly applied the no lethality standard  
7 from TCEQ's rules. But all the experts, including two  
8 of the Executive Director's witnesses, and a Port Zone  
9 expert testified that the no lethality standard  
10 applies. And that standard is set out twice in your  
11 rules. The courts have been very clear that it is a  
12 reversible error for an agency to not follow its own  
13 rules. The no lethality standard does apply, and it  
14 must be followed.

15 However, even if TCEQ rules did not contain the  
16 no lethality standard, the judges' analysis of the six  
17 issues decided against the Port still clearly supports  
18 denial of this permit, not a remand.

19 I want to conclude with this. The decision you  
20 make today has the potential to dramatically affect  
21 one of the treasured bays and coastal economies in  
22 Texas. Contrary to the Port's assertions, denying  
23 this permit does not set a precedent that no discharge  
24 from desalination plants can ever be authorized by  
25 you. Rather, denying this permit will demonstrate

1 that you believe in sound science, and in protecting  
2 both the environment, and critical economic  
3 activities, like commercial and sports - sport fishing  
4 along the Texas coast.

5 The evidence is clear. This permit must be  
6 denied. This location for this discharge is terrible.  
7 And ultimately you - all the science dictates that  
8 this permit should be denied, and remanding it --

9 FEMALE SPEAKER: That's time.

10 MR. BENNETT: -- will do nothing to fix that.  
11 Thank you.

12 CHAIR NIERMANN: Go ahead, finish up, Mr.  
13 Bennett.

14 MR. BENNETT: Okay. That, that was my closing  
15 - just, a remand will do nothing to fix the discharge  
16 location, which has to be moved. Thank you very much.

17 CHAIR NIERMANN: Mr. Bennett, thank you very  
18 much for your presentation. I appreciate that.

19 Colleagues, any questions for Mr. Bennett?  
20 Commissioner Lindley?

21 COMMISSIONER LINDLEY: No questions. Thank  
22 you.

23 CHAIR NIERMANN: Mr. Janecka?

24 COMMISSIONER JANECKA: Not at this time.

25 Thanks.

1 CHAIR NIERMANN: Thank you. Colleagues, I'm  
2 sorry to keep doing this, but let me, let me pause on  
3 Item Two for now, and see if we have Representative  
4 Cook available to, to address the Commission on Old  
5 Business Item One. Representative Cook, are you  
6 there?

7 REPRESENTATIVE COOK: Yes, Sir, I'm finally  
8 here.

9 (SKIP TO 43:15 - PROPOSAL FOR DECISION, ITEM 2)

10 CHAIR NIERMANN: Colleagues, let's return to  
11 Item Two, and Ms. Smith, just so we're minding our Ps  
12 and Qs, I'll have you read the caption again, please.

13 MS. SMITH: Item Number Two is the  
14 consideration of the ALJs' PFD and proposed order  
15 concerning the application by the Port of Corpus  
16 Christi Authority, for a TPDES permit.

17 CHAIR NIERMANN: Thank you, Ms. Smith, and  
18 colleagues, and, and parties again, I apologize for  
19 chopping up the presentation on Item Two. It's just a  
20 difficult time. We want to hear from our elected  
21 representatives, and it's, and it's hard to do that  
22 during the Legislative Session. So I'm glad we could  
23 fit all that in.

24 Next up is the presentation by the Executive  
25 Director. And I'll ask you to identify yourself, and

1 go ahead when you're ready.

2 KATHY HUMPHREYS: Good morning. I'm Kathy  
3 Humphreys with the Water Quality Division. I - well,  
4 I'm sorry. Let me start over. I'm Kathy Humphreys  
5 with the Environmental Law Division. With me today  
6 are Peter Schaefer, Shannon Gibson, and Katie  
7 Cunningham of the Water Quality Division. I'm going  
8 to limit my remarks to three specific topics - the  
9 Executive Director's request for remand, concerns over  
10 potential toxicity, and the appropriate use of the  
11 Texas Parks and Wildlife, General Land Office Study.

12 Following our standard practice, the Executive  
13 Director used the CORMIX model to evaluate the Port of  
14 Corpus Christi's proposed discharge. The depth of the  
15 diffuser is a critical input to the CORMIX model used  
16 by staff to determine the effluent percentages at the  
17 boundaries of the regulatory emission zones. The  
18 effluent percentages predicted by the CORMIX model are  
19 used to establish water quality based effluent limits,  
20 biomonitoring parameters, and in the antidegradation  
21 review.

22 During the course of the Administrative  
23 Hearing, the Executive Director learned that the  
24 diffuser would be located at a depth of approximately  
25 90 feet, rather than 63 feet as represented in the

1 application. Also during the hearing, there was  
2 discussion about the Executive Director's use of  
3 default ambient velocity values, rather than a site  
4 specific ambient velocity. Because of this new  
5 information, the Executive Director respectfully  
6 requests the Commission remand this application to  
7 SOAH, to take additional evidence on the ambient  
8 velocity, actual depth and flow of the channel at the  
9 proposed diffuser location, and for additional  
10 consideration of the other issues that rely on the  
11 CORMIX model.

12 To ensure the draft permit complies with all  
13 applicable regulatory requirements, after the model is  
14 rerun with new input, other water quality permitting  
15 staff will need to evaluate the impact of the model  
16 results on the antidegradation review, damage review,  
17 and the draft permit. These reviews correlate with  
18 referred issues - A) whether the proposed discharge  
19 will adversely impact the marine environment, aquatic  
20 life, and wildlife, including birds, and endangered or  
21 threatened species, spawning eggs, or (unintelligible)  
22 migration; Issue C) whether the proposed discharge  
23 will adversely impact recreational activities,  
24 commercial fishing, or fisheries in Corpus Christi Bay  
25 and the Ship Channel; D) whether the application and

1 representatives therein are complete and accurate; G)  
2 whether the modeling complies with applicable  
3 regulations to ensure the draft permit is protective  
4 of water quality, including using accurate inputs; H)  
5 whether the Executive Director's antidegradation  
6 review was accurate; and I) whether the draft permit  
7 includes all necessary and appropriate requirements.

8           Additionally, the Executive Director recommends  
9 that the duration of the hearing on remands be 120  
10 days from the date of the preliminary hearing, to the  
11 issuance of the administrative law judges' proposal  
12 for decision.

13           The next issue I will address is the potential  
14 for toxicity from the Port of Corpus Christi's  
15 discharge. In addition to remanding the application  
16 to SOAH for additional evidence, the Executive  
17 Director respectfully requests the Commission find  
18 that any potential toxicity in the Port of Corpus  
19 Christi discharge will be addressed through whole  
20 effluent toxicity testing.

21           It is important to note that based on the  
22 requirements in 30 TAC Section 307.6E, and the  
23 threshold criteria established in the 2010  
24 Implementation Procedures, a whole effluent toxicity  
25 review, also reviewed - referred to as a biomonitoring

1 review, was not required for the Port of Corpus  
2 Christi's proposed discharge. However, based on  
3 public comments, the Port of Corpus Christi  
4 voluntarily to include biomonitoring requirements in  
5 the draft permit. The draft permit includes  
6 requirements for the 24-hour acute WET testing, and  
7 48-hour WET testing.

8           The purpose of biomonitoring is to directly  
9 measure the aggregate toxic effects, in terms of  
10 lethality, and sub-lethality on sensitive surrogate  
11 species, including vertebrates and invertebrates, when  
12 exposed to effluent at the critical dilution of the  
13 receiving waters. More simply put, biomonitoring  
14 evaluates effect of the discharge on test species.

15           The last issue I will address is the importance  
16 of the Texas Parks and Wildlife, General Land Office  
17 Study. This study was required by HB-2031 from the  
18 84th Legislature, which created New Texas Water Code,  
19 Chapter 18, relating to marine seawater desalination  
20 projects. Section 18-005E requires the TCEQ to  
21 provide an expedited procedure for acting on an  
22 application. (unintelligible) 005G requires that the  
23 Texas Parks and Wildlife Department, and the Texas  
24 General Land Office recommend discharge zones, where  
25 permittees with permits issued under Chapter 18 are

1 authorized to discharge. Chapter 18 does not limit  
2 discharges permitted under Chapter 26 to the discharge  
3 zones described in the study. Thus, the study not -  
4 should not be used to evaluate applications submitted  
5 under Chapter 26.

6 Because the application for the Port of Corpus  
7 Christi was submitted under Chapter 26, the location  
8 restrictions in Chapter 18 do not apply to the  
9 application, and should not have been considered as  
10 conclusive by the administrative judge. Thank you,  
11 and we're available for questions.

12 CHAIR NIERMANN: Thank you, Ms. Humphrey,  
13 appreciate the - Humphreys - I appreciate the  
14 presentation. I don't have any questions at this  
15 point. Colleagues, any questions or comments?  
16 Commissioner Lindley?

17 COMMISSIONER LINDLEY: No questions. Thank  
18 you.

19 CHAIR NIERMANN: Commissioner Janecka.

20 COMMISSIONER JANECKA: I have one question, I'd  
21 like to try to start to carve into with ED staff  
22 while, while we have them available right now. Ms.  
23 Humphreys, I'm just curious - could you comment at all  
24 on what extent the WET testing may inform Agency staff  
25 about the, the degree of lethality that - or toxicity

1 that, that it may pose, the, the discharge from this  
2 permit application may pose for - you mentioned it, it  
3 will measure lethality for vertebrates and  
4 invertebrates. I'm, I'm curious - does this capture  
5 the larval lifecycle stage of the fish that, that -  
6 the aquatic life forms that were of such interest in,  
7 in this item, and the discussion at SOAH.

8 KATHY HUMPHREYS: Commissioner Janecka, I think  
9 this would be - best be addressed by Peter Schaefer of  
10 the water Quality Division.

11 PETER SCHAEFER: Hi, Commissioners, Chairman.  
12 This is Peter Schaefer of the Water Quality Division.  
13 Our biomonitoring testing requirements in this permit  
14 are two-fold. There's a 24-hour, acute biomonitoring  
15 test, and a 48-hour, acute biomonitoring test. Now,  
16 the - these tests are just looking at lethality  
17 They're not looking at growth and reproduction. That  
18 would be a chronic aquatic - that would be a chronic  
19 toxicity test.

20 CHAIR NIERMANN: Mr. Schaefer, let me, let me  
21 just add a - maybe a clarifying question. Lethality -  
22 does it, does it consider lethality to, to, to life in  
23 the larval stage? Or is it all stages? Or just, just  
24 adult stages? Or, or - how, how is that done?

25 PETER SCHAEFER: In this case, it is adult

1 stages. It is the - the test species are the Mysid  
2 shrimp, and the inland silverside.

3 CHAIR NIERMANN: Okay. I appreciate that.  
4 Commissioner Janecka, did that answer your question?

5 COMMISSIONER JANECKA: It did. Thank you.

6 MS. SMITH: And, and may I remind the  
7 Commission that because this is oral argument, and not  
8 an opportunity to testify, we probably should stick to  
9 responses from counsel, based on, on record - of  
10 record.

11 CHAIR NIERMANN: Thank you, Ms. Smith. That's  
12 a, an appropriate admonition, and I - we all  
13 appreciate it. Colleagues, any other questions for  
14 staff at this point? All right. Let's turn to the  
15 Office of Public Interest Counsel. Mr. Wayne, are you  
16 with us this morning?

17 MR. WAYNE: Hey, good morning, Chairman,  
18 Commissioners, General Counsel, and the Executive  
19 Director's attorneys and staff. I am Sheldon Wayne  
20 with Office of Public Interest Counsel. And after  
21 considering all the evidence, and the argument that's  
22 been presented in this matter, including all post  
23 hearing filings, OPIC urges the position that was  
24 taken in our closing argument - that the Port of  
25 Corpus Christi Authority's application should be

1 denied. And further, we do not support a remand to  
2 SOAH to take additional evidence.

3           If approved, this approved desalination plant  
4 will discharge a high salinity of fluids into the  
5 Corpus Christi Ship Channel, near the confluence of  
6 the Corpus Christi Channel, the Lydia Ann Channel, and  
7 the Aransas Pass Inlet. This inlet connects the  
8 Aransas Bay with the Gulf of Mexico, and it's the only  
9 tidal inlet in the area. It is a region that is home  
10 to important aquatic species at the most vulnerable  
11 times of their lives - namely, their larval stages.  
12 In light of the vital importance of the spawning  
13 ground, and the larval migratory route that could  
14 potentially be affected by the proposed discharge,  
15 this application does merit a high degree of scrutiny.

16           This is a highly complex application, and the  
17 contested case featured nine referred issues.  
18 Therefore, I will use my time to comment on the most  
19 disputed issues.

20           Regarding the legal standard for evaluating the  
21 impacts to aquatic organisms - OPIC agrees with the  
22 administrative law judges, that based upon the plain  
23 language of the rules, the no lethality standard  
24 that's contained in Title 30 of the Texas  
25 Administrative Code, Section 307.9B2, is the correct

1 standard. The standard is contained in TCEQ's Rule,  
2 Applied Texas Surface Water Quality Standards, excuse  
3 me - and is entitled Application of Standards. It  
4 does not contain any exceptions, and it specifically  
5 applies to mixing zones. It states that acute  
6 criteria, and acute total toxicity levels may be  
7 exceeded in small zones of initial dilution at  
8 discharge points of permitted discharges - but,  
9 importantly, there must be no lethality to aquatic  
10 organisms that move through a zone of initial  
11 dilution.

12 Expert witnesses, including the Port Aransas  
13 Conservancy's witness, Dr. Andrew Esphaw (phonetic),  
14 the Executive Director's witness, Dr. Marianne Wallace  
15 (phonetic), and the Port Authority's own witness, Dr.  
16 Leall Tischler (phonetic), all agreed and confirmed  
17 that TCEQ's rules permitted any lethality within that  
18 zone of initial dilution. The alternative, no  
19 significant lethality standard contained in Section  
20 307.6E1 that's been advocated by the Executive  
21 Director and the applicant, applies only to measuring  
22 the impacts to aquatic organisms when conducting  
23 biomonitoring of the fluid samples under the specific  
24 guidelines applicable to whole effluent, which is also  
25 known as WET testing. It does not apply to evaluating

1 impacts to organisms that are actually traveling  
2 through the zone of initial dilution.

3           There are obviously two standards here. The  
4 biomonitoring required by WET testing evaluates acute  
5 toxicity to aquatic organisms over an extended period  
6 of time. It makes sense that over a longer period of  
7 time, exposure could result in some deaths to the  
8 aquatic organisms, as long as there's no significant  
9 lethality.

10           In contrast, while aquatic organisms are  
11 exposed for a much shorter period of time, while  
12 actually traveling through the zone of initial  
13 dilution, there should be no lethality. Additionally,  
14 application of the no lethality standard results in a  
15 harmonious reading of the rules, and one that ensures  
16 all words are given effect. If the no significant  
17 lethality standard were to - were to apply as broadly  
18 as recommended by the Executive Director and  
19 applicant, Rule 307.8B2's express requirement that no  
20 lethality occur in the zone of initial dilution would  
21 be rendered meaningless, an outcome that should be  
22 avoided, if possible.

23           Now, regarding the modeling that was performed,  
24 and relevant to a number of issues, the administrative  
25 law judges found that there were many shortcomings in

1 the CORMIX model - among other things, it utilized  
2 inaccurate and unrepresentative (unintelligible) and  
3 ambient water velocity data; a diffuser design that  
4 will not achieve permit limits; and ignored the  
5 presence of an eddy and resulting hole located  
6 directly at the proposed diffuser's location. Because  
7 the model used these inaccurate inputs, the tests -  
8 sorry, the results it produced provide no assurance  
9 that the draft permit is protective of water quality.

10           Regarding Issue A) - OPIC agrees with the  
11 administrative law judges that the Port failed to  
12 carry its burden in proving that the discharge will  
13 not adversely impact aquatic life. Protestants  
14 presented compelling evidence that a vast number of  
15 larva are likely to be adversely affected, and indeed,  
16 killed, because they lack the ability to swim, and the  
17 currents will carry them through the mixing zones,  
18 including the zone of initial dilution. The Port did  
19 not rebut this evidence with any convincing showing  
20 that the larvae would not suffer lethal effects. And  
21 as previously discussed, the Texas Surface Water  
22 Quality Standards require that there be no lethality  
23 to organisms that move through that zone of initial  
24 dilution.

25           Regarding Issue C) - OPIC agrees with the ALJs

1 that adverse effects to larva organisms could cascade  
2 and cause harm to fisheries and commercial  
3 recreational fishing.

4           Regarding Issue D) - OPIC agrees with the ALJs  
5 that the application is not complete and accurate. In  
6 addition to the errors related to the CORMIX modeling  
7 previously discussed, the application inaccurately  
8 identifies the diffuser height and channel depth at  
9 the location of the outfall.

10           Regarding Issue H) - OPIC agrees with the ALJs  
11 that the antidegradation review was not accurate, and  
12 did not ensure that the discharge complies with - with  
13 substantive antidegradation standards.

14           Regarding Issue I) - OPIC is respectfully  
15 recommending denial of the permit. But if the  
16 Commission disagrees and is inclined to issue the  
17 draft permit, OPIC maintains its position that it does  
18 not include all appropriate and necessary  
19 requirements. Among other things, the description of  
20 the zone of initial dilution is ambiguous, and it  
21 would be reasonable to include a six month deadline  
22 for completion of the ambient water velocity study.

23           Finally, regarding the Executive Director's  
24 currently pending motion to remand, OPIC takes the  
25 position that remand is inappropriate. The equities

1 here favor denial of the permit. Remand is sought in  
2 part to evaluate the effects of an eddy in a hole that  
3 increased the depth of the channel bottom at the  
4 discharge location, from the 63 feet, as identified in  
5 the application, to 90 feet. However, this hole has  
6 existed for many years, and has been identified in  
7 Army Corps of Engineers surveys since at least 2011.  
8 The Port chose to ignore these characteristics of the  
9 discharge location, and instead submitted, and  
10 continues to defend, a materially inaccurate  
11 application - inaccuracies which the protestants have  
12 identified, and which has already resulted in revision  
13 of the draft permit after this matter was referred to  
14 SOAH.

15           The protestants have expended considerable  
16 resources litigating this matter, and under these  
17 circumstances, it would be unfair to allow the Port  
18 another opportunity to meet its burden on this  
19 application.

20           Additionally, OPIC notes that at any point  
21 prior to the issuance of, of the Proposal for  
22 Decision, the Port could have explored withdrawing its  
23 application without prejudice, which would have  
24 allowed it to correct, and resubmit. This course of  
25 action would have conserved all parties' resources,

1 including those of the TCEQ, and SOAH. Instead, the  
2 Port elected to proceed with the contested case  
3 hearing process, and see this matter to its  
4 conclusion.

5           Considering all of this, it seems appropriate  
6 to OPIC that the applicant be held to that choice.  
7 And it is for these reasons that OPIC respectfully  
8 recommends denial of the motion to remand.

9           OPIC further recommends the Commission adopt  
10 the ALJs' Proposal for Decision, and deny this  
11 application. Finally, OPIC recommends the Commission  
12 sustain and incorporate the proposed changes as set  
13 out in the ALJs' reply letter. Thank you, and I'm  
14 available for any questions.

15           CHAIR NIERMANN: Thank you, Mr. Wayne. I  
16 appreciate your presentation. I have none.  
17 Colleagues, any questions or comments? Commissioner  
18 Lindley?

19           COMMISSIONER LINDLEY: I have no questions.  
20 Thank you.

21           CHAIR NIERMANN: Mr. Janecka.

22           COMMISSIONER JANECKA: None. Thank you.

23           CHAIR NIERMANN: Thank you. And Mr. Wotring,  
24 you've - you have four minutes for rebuttal, Sir.

25           MR. WOTRING: Thank you. Good morning. Let me

1 hit on some of the more important points that were  
2 just addressed. First, the Port Authority is trying  
3 to carry out its local government function to address  
4 the important interests of the 400,000-plus residents  
5 in Nueces and San Patricio Counties, and to make every  
6 effort, as the Texas Legislature directed, to secure  
7 and develop plentiful and cost effective water  
8 supplies to meet the ever increasing demand for water.  
9 There is no local government, no other persons  
10 opposing the Port Authority's efforts, except for one  
11 nonprofit, and a handful of individuals.

12 With regard to statements from the protestants  
13 that this is not a matter of not being in their  
14 backyard - their own expert, who was referred today  
15 said, and I'm quoting, "I probably should not say it  
16 out loud, but I, too, am biased in my opinion about  
17 this facility. If nothing else, I just don't want the  
18 damn thing built here.'

19 With regard to the location of this facility -  
20 it is appropriate. The evidence in the record  
21 establishes that because of the enormous tidal  
22 activity in the area, that means that the 95 million  
23 gallons per day will be diluted to no more than one-  
24 half of one percentage point of the total tidal volume  
25 in the area of discharge - one-half of one percent.

1 Claims about it being in the wrong location are not  
2 supported by any specific data, but by the  
3 protestants' experts, who have not provided a reliable  
4 basis for those opinions; or, as the protestants  
5 admitted in their briefing, the - their experts have  
6 made clear that specific data is not necessary for  
7 their opinions as to some of the deficiencies they  
8 identify. They have provided qualitative opinions,  
9 not supported by data, and that would not be  
10 admissible in any civil court in the state of Texas.

11 Let me reserve a fair amount of time here to  
12 make sure that the Commissioners understand not only  
13 the Port Authority's view, but also, the Executive  
14 Director's review on the interpretation of whether  
15 there is a no lethality standard in the zone of  
16 initial dilution, or no substantial standard.  
17 According to the Executive Director, if the  
18 Commissioners sign off on the proposed - Proposal for  
19 Decision, the Conclusion of Law Number 10, then it  
20 would mean that if any organism were to die in the  
21 boundaries of the ZID, regardless of the  
22 circumstances, such an instance would be impermissible  
23 under Texas law. Under this interpretation, even  
24 single-celled organisms such as phytoplankton that are  
25 caught in the turbulence and subsequently die would

1 present a fatal flaw in every TPDES permit. Such a  
2 conclusion is illogical in an ecosystem that functions  
3 under typical biological processes, even if the  
4 effluent flow were simply redirected to  
5 (unintelligible) Channel water.

6 In our view, if the court were - if the  
7 Commissioners were to sign off on the Conclusion of  
8 Law Number 10, it would have a vast and negative  
9 impact, not only on this permit, but hundreds of  
10 existing and proposed permits - and proposed permits.

11 The Port Authority has been, and is willing to  
12 consider any and all improvements to the permit, to  
13 permit - and everyone to understand that it is  
14 protective of the marine life, and the environment,  
15 including enhancements to WET testing, or other permit  
16 requirements.

17 We want the opportunity to carry out the  
18 Legislature's commandment that we make every effort to  
19 provide drinking water for the people in the area of  
20 (unintelligible).

21 FEMALE SPEAKER: That's time.

22 CHAIR NIERMANN: Thank you, Mr. Wotring.  
23 Colleagues, any questions for Mr. Wotring?

24 COMMISSIONER LINDLEY: None for me.

25 CHAIR NIERMANN: Commissioner Janecka?

1           COMMISSIONER JANECKA: I don't believe so.  
2 Thank you.

3           CHAIR NIERMANN: Thank you. I do have a  
4 question. I'm not sure if - if they'll have an answer  
5 for - for both Mr. Bennett and Mr. Wayne. I'll begin  
6 with Mr. Bennett - same question. And that is, we  
7 just heard that - Mr. Wotring's view that accepting  
8 Conclusion of Law 10 - we're talking about the  
9 standard for lethality in the, in the ZID. His, his  
10 reading is that any death in the ZID would be  
11 impermissible, even a single-cell organism. And I  
12 wanted to get your reaction to that, beginning with  
13 you, Mr. Bennett, whether you think that's a, a, a  
14 correct understanding, or what your view is, generally  
15 - or perhaps, if you haven't formed a view about it.  
16 But Mr. Bennett, go ahead when you're ready.

17           MR. BENNETT: That - yes. I, I think that it's  
18 a difficult question to answer, because I think it  
19 becomes very fact specific, meaning looking at what  
20 are we talking about in, in a particular case.  
21 Ultimately, I think one of the problems here is, we're  
22 not talking about a single-cell organism. We're  
23 talking about fish larvae that are clearly  
24 significant. To the extent that you want to interpret  
25 in the - the no lethality to apply not to single-cell

1 organisms, there may be some room for that. I don't  
2 know the scientific basis. I think there'd have to be  
3 some evaluation. Clearly, there was a reason that the  
4 Commission adopted that language in their rule, and  
5 it's there.

6 And, and where - I mean, partially - what's  
7 important to note is, that's in the rules, regardless.  
8 I mean, whether it applies to other sorts of  
9 constituents, whether it applies to salinity - it's  
10 there. It's not just something that would apply to  
11 desalination. It's something in your rules that  
12 applies to, you know, a number of different things  
13 related to water discharge.

14 And so, ultimately, yes, you have to wrestle  
15 with how that applies. I think certainly it applies  
16 to larvae, which are, you know, significant to the  
17 growth of, of adult fish populations. They're the,  
18 they're the underpinning of it. Single-cell  
19 organisms? I don't know. I guess we would have to  
20 factually look at the specifics of a case. I  
21 certainly don't think that the adoption of the no  
22 lethality standard - which again, has already been  
23 adopted in your rules - would be the death knell for  
24 desalination, or any other wastewater permit. So I,  
25 I, I guess I'm not sure I can answer that, because I

1 think it's a very scientific, and fact based inquiry  
2 that goes into each case, depending on what sort of  
3 organisms we're talking about.

4 CHAIR NIERMANN: Thank you, Mr. Bennett. Mr.  
5 Wayne, let me put the same question to you - as a, as  
6 a - and, and this is really a question of legal  
7 interpretation. How does the Office of Public  
8 Interests view this as a statement of, of law, if I  
9 can frame it that way, and, and it's - whether it's  
10 correct that any death in the zone of initial dilution  
11 is impermissible, including even the death of a  
12 single-cell organism - if you have a reaction to that,  
13 go ahead.

14 MR. WAYNE: Absolutely. And thank you,  
15 Chairman. You know, I - what, what OPIC really rested  
16 the, the basis for our position on was the plain  
17 language of the rule. It - the rule says that there  
18 is - no lethality should occur. And, and we think  
19 that that's a workable rule. It's been in the Texas  
20 Administrative Code, and in effect for many years.  
21 And that same language appears in multiple places, in  
22 addition to 307.8B2; it also appears in 307.6. And I  
23 believe that it appears in - I apologize - I, I am  
24 grappling for that exact citation. In 307.6B6, I  
25 believe it appears, as well.

1           It, it's, it's unknown why that standard would  
2 be workable in some circumstances, but not others, as  
3 advocated by the Executive Director and, and the Port.  
4 And, and here, really, it's a, it's a matter of the  
5 location that, that was chosen. The Port has location  
6 that's home to many vulnerable organisms, at indeed,  
7 the most vulnerable stage of their lives. If a, a  
8 different location was chosen, we think that, that the  
9 circumstances would be materially different, and there  
10 wouldn't be near as much of a concern, or the concern  
11 would certainly be lessened, if not, you know,  
12 minimized, or, or reduced entirely - that organisms  
13 would, would not suffer lethal effects. We think that  
14 that could be achieved easily in a different location,  
15 and it's simply because of the extremely sensitive  
16 nature of this location that the Port has such trouble  
17 making that showing.

18           I, I do think that it would be a little bit  
19 illogical, and - to apply this same line of reasoning  
20 all the way out to single-celled organisms. I don't  
21 believe that the Commission even considers single-cell  
22 organisms. But I'm not a technical expert. So I, I  
23 believe that that would be a, an absurd result, and,  
24 and that would be, you know, my kind of legal  
25 reasoning on, on that - on the spot.

1 CHAIR NIERMANN: Thank you, Mr. Wayne. I  
2 appreciate it. And I'm sorry to put you - I'm sorry,  
3 Mr. Bennett - sorry to put you both on the spot, but  
4 Mr. Wotring raised the issue, and I was curious about  
5 it. So, I - I do appreciate you taking a stab at, at  
6 an answer.

7 MR. WAYNE: Oh, no apology necessary. I wish I  
8 had formulated a slightly better answer for you both.

9 CHAIR NIERMANN: Well, you're - you can't  
10 anticipate every question you might get. But thank  
11 you for that. Colleagues, any questions for any of  
12 the parties at this point?

13 COMMISSIONER LINDLEY: No questions. I thought  
14 that was a great question, and appreciate both  
15 gentlemen responding.

16 CHAIR NIERMANN: Thank you, Commissioner  
17 Lindley. Commissioner Janecka?

18 COMMISSIONER JANECKA: I just really can't help  
19 but want to ask a question because it seems so simple  
20 and obvious to me. I think this would be best  
21 directed to Mr. Wotring. And, and it simply goes to  
22 the - helping me understand, so that I can help  
23 explain to the public when inevitable intense focus  
24 and attention continues on this, this new area of our,  
25 our state's search for water, for the public. And,

1 and that is simply, do - have - has your client looked  
2 into, and, and given a, an explanation - and I'm not  
3 sure that it really bore out very explicitly or  
4 clearly in the record - but what, what's the answer  
5 for why there was a, a discrepancy between the depth  
6 of the bottom at the discharge point of the outfall,  
7 of, of 60, approximately 60 feet, versus 90 feet?

8 MR. WOTRING: Because there was a localized  
9 eddy that changes the, the bisymmetry at that exact  
10 location. And they - in our view, and I - we think  
11 our expert testimony provided this in the record -  
12 that that eddy and that localized increase in depth  
13 enhances the mixing, and makes, makes existing  
14 modeling more conservative.

15 The ALJs disagreed, and they wanted more  
16 specific data. That's the type of data that we think  
17 we can provide that will show that being deeper, and  
18 having more current enhances the mixing, and provides  
19 more protection for marine life and the environment.  
20 And I'm hoping that answers the question. They - if -  
21 yes, of course in retrospect, we, we, we'd provide a  
22 much more complete choice of the localized bisymmetry  
23 in the area, to avoid exactly these issues.

24 COMMISSIONER JANECKA: I appreciate that. And,  
25 and I wonder - as a final question, if you might

1 respond to the questions that have been raised by the  
2 other commenters about, about your client's decision  
3 to continue on and proceed with the application, past  
4 the point of being made aware of, for instance, that,  
5 that discrepancy - in the data in the application  
6 versus conflicting data from elsewhere. Could you  
7 possibly speak to the --

8 MR. WOTRING: Well --

9 COMMISSIONER JANECKA: Would you care to  
10 respond to that?

11 MR. WOTRING: Yes, I - yes, of course. Happy  
12 to, happy to have - to respond to that. Again, for,  
13 for issues like the bisymmetry, and the tidal ambient  
14 velocity, and the eddy flow - it was our view that  
15 those additional, the localized factors made the  
16 existing modeling more conservative, and meant that if  
17 you factored those things into the modeling, they  
18 would be - that you would have enhanced mixing, and  
19 enhanced solution, and be more protective of, of the  
20 environment. And we believe the administrative record  
21 bears that out.

22 But, you know, the ALJs disagreed with that.  
23 That's the kind of things we, we can provide. It -  
24 the, the reason the Port continues, because we thought  
25 the localized matters made our model more

1 conservative, not more risky for the marine  
2 environment. And, and I will say that there is a time  
3 component in trying to get desalinization permits. We  
4 understand the process. We also understand the  
5 urgency of the need in the area, and backing up, and  
6 trying to start over is going to take us back at least  
7 two, possibly three years. And the Port Authority, as  
8 a local government entity, is very concerned about the  
9 next drought in which there will be no alternative  
10 source of potable water for the people, or industry in  
11 the area.

12 MR. BENNETT: Commissioners, may I briefly -  
13 this is Craig Bennett, on behalf of Port Aransas  
14 Conservancy. I would just like to briefly make one  
15 quick point, if that's okay, to something Mr. Wotring  
16 just said.

17 And that is, ultimately, it would have been  
18 easy for the Port to just do alternate modeling. They  
19 could have modeled both. And so the idea that, 'Oh,  
20 well, we just took the conservative approach, so...'  
21 That really falls on deaf ears with me, because it's  
22 like, just do both. Have both ready, because you know  
23 you're not using accurate data. So I - to me, that  
24 would have been the easy solution, and then everybody  
25 could have had a hearing, evaluating both.

1 CHAIR NIERMANN: Thank you, Mr. Bennett. And  
2 thank you, Mr. Wotring, for your explanation, as well.  
3 Commissioner Janecka, did that answer your question  
4 sufficiently?

5 COMMISSIONER JANECKA: (unintelligible) no  
6 other questions for me at this time. Thank you.

7 CHAIR NIERMANN: Okay. Well, colleagues, let  
8 me, let me share my thinking on this, and just kind of  
9 starting at the basics. The, the Legislature created  
10 a framework for authorizing desalination facilities  
11 that are protective of public health and the  
12 environment. And of course, our agency has  
13 promulgated implementing regulations, and now we're  
14 getting a chance to test those in a first of its kind  
15 application. And my observation is, things could have  
16 gone smoother - not unexpected that things were bumpy  
17 in a, in a first of its kind application; but they  
18 could have gone smoother.

19 I do, though, think that the process is  
20 working, and that the protestants have raised  
21 legitimate questions about the protectiveness of the  
22 proposed authorization. And now those questions can  
23 be addressed.

24 So the ALJ identified several instances in  
25 which the applicant failed to meet its burden. They

1 almost all trace back to the inaccurate inputs to the  
2 CORMIX modeling that we've been discussing this  
3 morning, specifically the bisymmetry and the velocity  
4 data.

5           And what I ascertained in preparing for this  
6 item today, and what we've just heard from the  
7 applicant, is that the applicant had an opportunity,  
8 but did not take the opportunity to correct the  
9 inputs, on the believe that these were errors on the  
10 side of caution. In other words, the applicant  
11 thought the errors made the modeling more  
12 conservative. You know, we can now all appreciate  
13 that that is not an entirely safe assumption. We  
14 simply - we simply don't know. And so it makes sense  
15 that - to, to, to look at that. I mean, it may have  
16 been helpful, to Mr. Bennett's point, to, to have  
17 already done that work. It's not done. I think we do  
18 still have an opportunity to do that.

19           And of course, the questions about the CORMIX  
20 inputs have raised questions about the diffuser  
21 design, the antidegradation review, impacts to  
22 fisheries, and, and so on.

23           So I do think we have two paths here. We could  
24 accept the protestants' invitation to deny the  
25 application, or the Executive Director's invitation to

1 remand the matter, to take additional evidence on the  
2 six issues that staff identified.

3           And I, I really do think there are equitable  
4 arguments on both side. And I appreciate the burden  
5 this matter has already placed on all of the parties.  
6 But in my view, the weight of the equities, and the  
7 better policy is to remand the matter, so that we can  
8 determine whether the proposed authorization is indeed  
9 protective, based on more precise data inputs. And so  
10 that's, that's what I would propose.

11           I do want to address the standard for lethality  
12 in the zone of initial dilution, and acknowledge that  
13 our rules are, are indeed ambiguous about whether  
14 there should be no lethality, or no significant  
15 lethality. And in my view, the more permissive rule,  
16 that is 307.6E1 is the correct standard. And in part,  
17 because the more, the more restrictive standard, the  
18 no lethality standard in Sections 307.8D2 and 307.6C6,  
19 that - those, those sections apply only to numerical  
20 acute criteria for toxic substances, and there's no  
21 numerical criteria for salinity, or salt. So that, in  
22 a nutshell is how I view that particular legal issue.

23           My view about remand - I do have a motion to  
24 that effect, that includes instructions on the legal  
25 standard, and the six issues to be remanded, as well

1 as some, some notes on scheduling with respect to the  
2 submission of additional information, when the  
3 preliminary hearing would occur and when the PFD would  
4 be issued.

5 But before I offer that, I would like to get a  
6 sense of, of how you view the matter, and, and whether  
7 you have different ideas, or reservations about a  
8 remand, or about my take on the legal standard or, or  
9 anything else. So let me pause there. And  
10 Commissioner Lindley, let me ask you for your  
11 thoughts.

12 COMMISSIONER LINDLEY: I'll keep my thoughts  
13 pretty brief. I think you addressed most of what I  
14 had jotted down as potentially saying today. You  
15 know, I've - everyone stated - Mr. - the applicant,  
16 and the protestants, you know, both attorneys for  
17 both, both groups, said - and I, I do completely  
18 agree, that there are - well, that I recognize all the  
19 potential positive impacts that desal will have for  
20 this state. And, and this issue is very, very  
21 significant for the future of water for our state.  
22 And so this one was really tough, mostly for that  
23 reason.

24 However, I - today, I don't - I'm not in a  
25 place where I would feel comfortable granting the

1 permit. And so like you said, the two options are  
2 remand, or to adopt the PFD. And I'm on - I'm  
3 supportive, and I'm, I'm on the same page, as I, I  
4 believe a remand is what's most appropriate today, and  
5 what I'd be comfortable doing. I think I have - I'm,  
6 I'm, I'm guessing our lists are somewhat similar.

7 I would be interested to hear, and we can let  
8 Commissioner Janecka talk first, but interested to  
9 hear your, your motion, especially on the lethalties,  
10 just to make sure I understand it completely. But I,  
11 I think we'll probably come down mostly the same on,  
12 on the issues. But anyway, I'll stop there. And I'm  
13 actually going to turn off my camera for one second,  
14 but I'm still listening. So I'm not going anywhere.

15 CHAIR NIERMANN: All right. Thank you,  
16 Commissioner Lindley. And just real quickly, my, my  
17 position on the, on the lethality standard is that it  
18 should be the, the, the standard for non-numeric  
19 criteria that's found at Section 306.6E1, which is the  
20 no significant lethality standard. That's what I  
21 would include in my motion. Commissioner Janecka.

22 COMMISSIONER JANECKA: Thank you, Chairman. I,  
23 I - first, first off, I, I think I'm in full agreement  
24 on, on the open question between which of those two  
25 ambiguous, somewhat ambiguous pathways, or, or which

1 standards would be applicable here. I, I think that  
2 the more permissive of the two, 307.6E1, is the  
3 appropriate standard to utilize in this case, given  
4 that there is no numerical value for salinity. The  
5 other two citations I think - I agree with you  
6 explicitly - refer and apply to conditions for which  
7 there are values.

8 But the, the, the - I appreciate you laying out  
9 the issue, as well. And I think that I'm, I'm also  
10 prepared to, to move forward with, with the remand  
11 today. And I think that the issues to that, and the  
12 issues that the Executive Director's staff agreed as  
13 appropriate for remand, (unintelligible) their, their  
14 motion I think is - or their filing - I, I'm in  
15 agreement with.

16 And I would, I would merely return back to the  
17 Executive Director's comments on, on the Texas Parks  
18 and Wildlife study. And, and I feel the need to chime  
19 a little bit to say that I appreciate ED staff making  
20 a, a very thorough evaluation of the, of the context  
21 from which that study came, and from which our agency  
22 officially will, will reference, and needs to  
23 acknowledge that. But I think I'm in strong agreement  
24 with the, with the conclusions of the ALJ in, in  
25 regards to that point, and just wanted to touch on

1 that while we're discussing the host of issues, and at  
2 the risk of forgetting to come back to this later.

3 So I'll, I'll toss in those last two cents,  
4 and, and just say that I'm, I'm - I would encourage ED  
5 staff to, to revisit where the ALJ made, made their  
6 findings around that study. And, and I think that to  
7 the extent that the ALJ highlighted that as a, a, a  
8 piece of, of valid information to, to be aware of and  
9 to consult in regards to a very sensitive, I would  
10 encourage ED staff to, to revisit that in that  
11 mindset, because I, I think that this is a very  
12 sensitive issue.

13 And stepping back - bigger, bigger issue,  
14 bigger picture - this is the first of what we hope  
15 will be many desalination facilities across our great  
16 state as we continue to grow, and have, have more and  
17 more population. And I think it's, it's imperative  
18 that we, we get it right. And for that reason, I  
19 think there's some really compelling public policy  
20 goals that there - are well served in being deliberate  
21 in how our agency considers it.

22 And I think - it appears to me that the real  
23 meat of this question - the technical question, in my  
24 mind, the open question is - is will the - will the  
25 release of, of this particular outfall, in a, in a

1 media where the life, the fauna are not mobile  
2 themselves, necessarily, and, and they may be moving  
3 through the, the emission source, which - I just have  
4 to observe, it's such a, a unique change of pace for  
5 us as an agency. We typically see the, the life -  
6 the, the fauna ambulatory, and they're able to go  
7 around the pollution sources. It's the exact opposite  
8 here.

9           But I think that, that - the questions that the  
10 protestants raise about the demonstration that ED is  
11 requiring, and the applicant is making - even to, to -  
12 volunteering, going above and beyond requirements to,  
13 to agree to the, the whole effluent testing, the  
14 biomonitoring it - which I appreciate - I think that  
15 it, it comes right up to the edge of the very  
16 important issue, which is - is there an open  
17 discrepancy about, about this permit and this  
18 facility.

19           And I think that there is a real public policy  
20 - a negative outcome - if our agency were to proceed  
21 injudiciously, too quickly, and that would be if - if  
22 a facility would be decided without that determination  
23 being appropriately made, I would hate to see other  
24 external factors affecting fish stocks, the, the Texas  
25 maritime economy, fishing industry - for whatever

1 reason, I would hate for a desal facility, the first,  
2 the first desal facility in the state, as timing may  
3 allow - to be blamed inappropriately, or incorrectly  
4 as the guilty party in a, in a - what we're all too  
5 used to seeing, in a very complex environmental,  
6 environmental question that's very difficult to answer  
7 with any, with any certainty.

8 I think if we don't try our utmost now to  
9 answer that question to the best ability - to the best  
10 of the ability that we can, or to put in the  
11 appropriate questions structured into the permit. I,  
12 I think that's a really important public policy  
13 outcome to, to be mindful of.

14 So I'll - I think I'm circling around that. I  
15 don't know that I have a really very concise point  
16 and, and I, I appreciate the time to chime in.  
17 Thanks.

18 CHAIR NIERMANN: Thank you, Commissioner.  
19 Yeah, I, I mean, fundamentally, our job here is - if  
20 we issue an authorization, our job is to make sure  
21 that that authorization is protective of public health  
22 and the environment, and in this case, especially the  
23 marine ecosystem. And you know, I think we're all in  
24 agreement that, that the applicant has not yet met his  
25 burden of proof on that. And, and that's really the

1 purpose for the remand.

2 Specifically to the Parks and Wildlife, GLO  
3 Study, since you brought it up, I'll just share my  
4 thoughts on, on this. And it's really - the analysis  
5 is, is, is really subsumed into that issue - a) that,  
6 that staff asked for a remand on, and that I would  
7 include in a remand motion, so I don't call it out  
8 specifically in, in the motion that I'll read in a  
9 moment.

10 But my view of that is, it is, it is neither  
11 controlling, nor is it irrelevant. It's not  
12 controlling, because it's a feature of, of our  
13 expedited permitting path, not this permitting path.  
14 But it's not entirely irrelevant, either. I think in  
15 my mind what it does is it identifies a sensitive  
16 area, and what, what that means to me is --

17 MALE SPEAKER: Yeah.

18 CHAIR NIERMANN: -- we need to be focused on  
19 this, and make sure that we are being careful in doing  
20 our job of making sure that the permit is protective.  
21 I think - I think Mr. Wayne phrased it as making sure  
22 that there is an appropriate degree of scrutiny for  
23 this application. And that's, to me, that's the  
24 relevance of that Parks and GLO study is, is this is -  
25 it - this is a, a sensitive area. I don't think

1 there's really a lot of dispute about that, but again,  
2 neither, neither controlling, nor, nor irrelevant.

3 Well, colleagues, let me do this. Let me - let  
4 me go ahead and read a motion. And then, and then  
5 invite any additional thoughts or comments.

6 I move that we remand this matter to SOAH for  
7 the ALJs to 1) apply the appropriate legal standard  
8 for non-numeric criteria found in 30 Texas  
9 Administrative Code Section 307.6E1, for evaluating  
10 the impacts to aquatic organisms that move through a  
11 zone of initial dilution. And 2) take additional  
12 evidence on the following issues: a) whether the  
13 proposed discharge will adversely impact the marine  
14 environment, aquatic life, and wildlife, including  
15 birds, and endangered or threatened species, spawning  
16 eggs, or larval migration. c) whether the proposed  
17 discharge will adversely impact recreational  
18 activities, commercial fishing, or fisheries in Corpus  
19 Christi Bay, and the Ship Channel. d) whether the  
20 application and representations contained therein are  
21 complete and accurate. g) whether the modeling  
22 complies with applicable regulations to ensure the  
23 draft permit is protective of water quality, including  
24 utilizing accurate inputs. h) whether the Executive  
25 Director's antidegradation review was accurate. And

1 i) whether the draft permit includes all appropriate  
2 and necessary requirements.

3 I further move that we - Number 3) set a 30 day  
4 deadline from the issuance of the Commission's order  
5 for the applicant to provide revised information to  
6 all parties, including the depth of the Channel, site-  
7 specific ambient velocity, and the depth of the  
8 diffuser. 4) allow the parties 30 days to review the  
9 revised information before setting a preliminary  
10 hearing. And 5) set the hearing duration for the  
11 proceeding at 120 days from the date of the  
12 preliminary hearing on remand, to the issuance of the  
13 Proposal for Decision.

14 So that is the - that is the end of my motion.  
15 And let me pause there, and invite any, any further  
16 discussion. Commissioner Janecka, you moved to the  
17 left of my screen for, for some reason. So reading  
18 from left to right, let me invite you to go, go first.  
19 Additional thoughts or comments?

20 COMMISSIONER JANECKA: Hazards of turning off  
21 your camera. I - I, I think I'm, I'm in agreement  
22 with that, with that motion. I, I'd be prepared to  
23 second it, if, if - and, and not seeing any concerned  
24 look from Commissioner Lindley, I'll, I'll go ahead  
25 and second that motion.

1           But getting onto discussion - I'm, I'm  
2 comfortable with that motion. I, I do have a question  
3 that I, I would want to just confirm - it wouldn't  
4 pose a, a logistical concern for, for the applicant on  
5 the 30 day deadline in this, in the proposed motion,  
6 to provide site specific ambient velocity. And I  
7 think - was that one of the factors that would have  
8 been proposed to be studied, which OPIC suggested -  
9 imposing a deadline, a specific deadline on providing  
10 that data - I just would love to make sure that that  
11 wouldn't pose any problems of setting a 30 day  
12 deadline for something that - I'd rather get the right  
13 value in our model, rather than a 30 day value, is  
14 what I'm trying to, trying to suggest here. So if, if  
15 those specific homework items aren't a problem or a  
16 concern for the applicant, then I'm, I'm perfectly  
17 comfortable. And then I don't have any other  
18 discussion.

19           CHAIR NIERMANN: Well, Commissioner Janecka,  
20 my, my, my reading - I can't tell you where this came  
21 from in this record. Maybe it was just an imagination  
22 or assumption on my part, was that those cite specific  
23 velocities were already published, and well known.  
24 And certainly, if they're not, they should be knowable  
25 within the 30 day deadline. And if they can't be, I

1 think we might have other problems. So I would, I  
2 would suggest we give them the opportunity to use  
3 their 30 days as they see fit, and either they -  
4 either they, they're able to provide that, or they're  
5 not, would be my recommendation, if that sounds all  
6 right.

7 COMMISSIONER JANECKA: Well said, and agreed.

8 CHAIR NIERMANN: Okay. Commissioner Lindley,  
9 additional thoughts, or comments, or questions?

10 COMMISSIONER LINDLEY: No. I, I would have  
11 seconded the motion. So --

12 CHAIR NIERMANN: Okay. So we have - we have a,  
13 a motion, and, and, and, and two seconds, which seems  
14 better than one. Let me take a vote. The motion has  
15 been made and seconded. Commissioner Lindley, how do  
16 you vote?

17 COMMISSIONER LINDLEY: Aye.

18 CHAIR NIERMANN: Commissioner Janecka, how do  
19 you vote?

20 COMMISSIONER JANECKA: Aye.

21 CHAIR NIERMANN: I also vote Aye. The motion  
22 carries. Ms. Smith, I'll ask you to return us to Old  
23 Business Number One, and call the caption, please.

24

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(END OF SECTION)

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TRANSCRIBER'S CERTIFICATE

I, MARY HARLOW, attest that the foregoing proceedings provided to me via video were transcribed by me to the best of my ability.

I further attest that I am not a relative or employee to any attorney or party nor financially interested in this action.

I declare under penalty of perjury under the laws of the state of Texas that the foregoing is true and correct.

Dated this 14th day of July, 2021.

  
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MARY HARLOW

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