To: Office of Chief Clerk  
From: Ruth Takeda  
Staff Attorney  
Environmental Law Division

Subject: Agenda backup – Executive Director's Response to Comments

| Applicant: | Port of Corpus Christi Authority of Nueces County |
| Proposed Permit No.: | WRPERM 13630 |
| Program: | Water |
| Docket No.: | TCEQ Docket No. 2021-0421-WR |

The Executive Director's Response to Comments is attached as backup for the July 20, 2022 agenda.

Please let me know if you have any questions or wish to discuss.

Thank you.
EXECUTIVE DIRECTOR'S RESPONSE TO COMMENTS

The Executive Director (ED) of the Texas Commission on Environmental Quality (TCEQ or the TCEQ) respectfully files this response to comments filed on Application No. 13630 from the Port of Corpus Christi Authority of Nueces County for a water use permit in San Patricio County, Texas. Requests for a contested case hearing were also filed, which the Executive Director addresses in a separate Response to Hearing Requests.

BACKGROUND

The TCEQ received this application on September 3, 2019. The application was declared administratively complete on May 11, 2020. Technical review was completed on December 4, 2020. Notice of the application was mailed by the TCEQ's Chief Clerk on February 5, 2021. Notice of the application was published on February 26, 2021 in the Corpus Christi Caller Times; on March 3, 2021, in the Ingleside Index; and on March 4, 2021, in the News of San Patricio.

The comment period and hearing request period for this application closed on March 29, 2021. Due to significant public interest in this application, the comment period was re-opened. Approximately 143 individuals requested a public meeting and provided comments indicating the basis for their requests. The Executive Director responded by scheduling a public meeting.

Notice of a public meeting was mailed on June 11, 2021. A virtual public meeting was held on July 13, 2021, and the public comment period on this application closed on July 13, 2021.

APPLICATION

The Port of Corpus Christi Authority of Nueces County (Applicant or POCCA) seeks authorization to divert and use not to exceed 101,334 acre-feet of water per year from a diversion point on Corpus Christi Bay, San Antonio-Nueces Coastal Basin, at a maximum diversion rate of 140.12 cfs (62,890 gpm) for industrial purposes in San Patricio County.

COMMENTERS

The following individuals and entities provided comments (written, oral or both) to the application. When substantially the same comments were provided more than once by a commenter, the comments have been treated as one submission. When substantially the same comments were provided by more than one individual, the individuals are
referred to collectively as commenters, individuals, or individual commenters. Businesses, groups, or organizations are referred to by acronym.

1. Eric Allmon, Ingleside on the Bay Coastal Watch Association (IOBCWA)
2. Carl Daniel Amsden
3. Isabel Araiza Ortiz
4. Rebecca Bateman
5. Peter Bella
6. Dawn Bissell
7. Nicholas James Borjas
8. David Bjork
9. David Bradsby, Texas Parks and Wildlife Department
10. Deborah Brown
11. L.C.
12. Sylvia Campos
13. Eduardo Canales
14. Elida Castillo
15. Elisa Castillo
16. Elsa Castillo
17. Patricia Coeckelenbergh
18. Jardel Costa
19. Tom Daley
20. David Del Moral
21. Margaret A. (Peggy) Duran
22. Gabriella Marie Ebertowski
23. Barney C. Farley
24. Debby Ferrell
25. Larry Ferrell
26. Valerie Fountain
27. Cathy Fulton
28. Guillermo Gallegos
29. Lexy Taylor Garcia
30. Jose Gonzales
31. Doug Gresenz
32. Chip Harmon
33. Jenessa Hernandez
34. Jennifer S. Hilliard
35. Donna L. Hoffman
36. Catherine A. Holmes
37. Jeffrey Douglas Jacoby, Texas Campaign for the Environment (TCE)
38. Ken Jones
39. James E. Klein
40. Teresa L. Klein
41. Uneeda E. Laitinen
42. Thomas Ledesma
43. Nancy Lubbock
44. Susan Hadley Lugo
45. Dewey Magee
46. Brandon Marks, Texas Campaign for the Environment (TCE)
47. Kathryn A. Masten
RESPONSE TO COMMENTS

GENERAL COMMENTS

COMMENT NO. 1: IOBCWA and an individual thanked Senator Judith Zaffirini and Representative J.M. Lozano for making the public meeting possible so that the public could offer comments on the permit.

COMMENT NO. 2: TCE thanked TCEQ for securing an interpreter for the public meeting.

COMMENT NO. 3: An individual commented that they are glad TCEQ held this hearing and an individual thanked TCEQ for allowing them to voice their opinion.

Response to Comment Nos. 1 - 3: The ED acknowledges these comments and thanks all of the commenters for participating in TCEQ’s public comment process.

COMMENT NO. 4: IOBCWA and individuals requested a second public meeting in person, since many comments were not allowed during the allotted time period of over
two hours. TCE requested that TCEQ hold an in-person public meeting. An individual commented that those who live near the area have not been heard or consulted on the project.

Response to Comment No. 4: The ED responds that TCEQ continues to carry out its mission to protect our state's public health and natural resources consistent with sustainable economic development during these unprecedented times. As Texas adapted to the ever-changing situation, TCEQ implemented solutions to move forward with agency business. Public participation is an integral part of the permitting process which is why the agency began using virtual meetings for public meetings. The ED believes that the virtual public meeting on this application provided an opportunity for the public to voice their concerns and comments. The public was also provided an opportunity to participate via telephone during the public meeting. In addition, a public meeting is not the only avenue for the public to express their concerns and ask questions. The public may also provide written comments to the TCEQ anytime during the public comment period and up to the conclusion of the public meeting. The TCEQ takes both oral and written comments into consideration during the permitting process.

COMMENT NO. 5: IOBCWA and TCE commented that TCEQ should not have limited comments during the public meeting to comments on the water rights application and diversion intake structure.

Response to Comment No. 5: The ED responds that the public meeting was held to take comments from the public on Application 13630 for a water rights permit. Issues related to the POCCA’s pending wastewater application and any associated discharge or issues related to other current or future projects were not considered in TCEQ staff’s review of the water right application under applicable TCEQ statutes and rules for water rights. The ED also notes that the POCCA’s pending TCEQ wastewater permit application is a separate authorization being processed separately from this pending water rights application.

COMMENT NO. 6: An individual expressed concerns that no one in the community knows exactly what the proposed project is about, that residents did not know about the public meeting, and that notice was sent to the community in the mail in English. An individual commented that TCEQ should be ashamed of their failure to educate the communities of San Patricio and Nueces County on what desalination means. An individual commented that people should be heard and not just industry. An individual commented that those who live near the area have not been heard or consulted.

Comment No. 7: An individual commented that notice in the Corpus Christi newspaper does not constitute notice to San Patricio County because there is a county newspaper that should be used.

Response to Comment Nos. 6 and 7: The ED responds that public participation is an integral part of the permitting process. TCEQ carefully considers all timely comments and relevant information received during the permitting process before making a final decision on an application. The ED further responds that notice of the application and public meeting were provided in accordance with TCEQ's
statutes, rules, and procedures for water right applications. Notice of the application was mailed to water right holders on February 5, 2021. POCCA published notice of the application in the Corpus Christi Caller Times on February 26, 2021. POCCA also published notice of the application in the Ingleside Index on March 3, 2021 and in the News of San Patricio on March 4, 2021. Notice of the public meeting was sent on June 11, 2021. All of the notices included a toll free phone number for individuals who need the information in Spanish. In addition, a public meeting was held on the application on July 13, 2021 and a translator was provided at the public meeting. Finally, the ED notes that the TCEQ accepted written comments on the application until July 13, 2021.

COMMENT NO. 8: IOBCWA, TCE, and individual commenters expressed opposition to the application and requested that TCEQ deny the application. Individual commenters were opposed to desalination projects in Corpus Christi Bay or its estuary systems.

Response to Comment No. 8: The ED acknowledges these comments.

COMMENT NO. 9: IOBCWA and individual commenters requested a contested case hearing.

Response to Comment No. 9: The ED responds that several requests for a contested case hearing were received on this application and that they are addressed by the ED in a separate Response to Hearing Requests. The TCEQ Commissioners will consider the requests at an open meeting, referred to as a Commission agenda, and will decide whether to refer the application to the State Office of Administrative Hearings for a contested case hearing.

COMMENT NO. 10: IOBCWA, TCE, and individual commenters expressed concerns that TCEQ did not consider the cumulative effects on the environment of multiple desalination plants in Corpus Christi Bay. An individual commented that industrial needs do not account for the cumulative impacts desalination would have on the communities that depend on the bay. An individual asked if the engineering firm, or anyone in the business of desalination, knows the impact of multiple desalination plants in a closed bay system. The commenter asked whether these proposed desalination projects have been presented or reviewed together before permitting, to determine the cumulative effects on the coastline, the city, and its citizens. The needs of the community should be carefully considered, with permits only issued for those facilities necessary which will be located, designed and constructed in a manner that would minimize adverse environmental impacts.

Response to Comment No. 10: The ED responds that TCEQ staff performed technical reviews on this application for instream uses, hydrology, and water conservation as required by the Texas Water Code and applicable TCEQ rules governing water rights. The ED believes that his proposed draft permit is protective of issues within TCEQ's jurisdiction and was developed in accordance with applicable water rights statutes and rules.

COMMENT NO. 11: An individual commented that they are disappointed that TCEQ did not approve the Petition for Rulemaking presented by IOBCWA, Port Aransas Conservancy, and Hillcrest Residents Association. The purpose of the rulemaking was
to prescribe reasonable measures to minimize impingement and entrainment of aquatic life from desalination plants.

Response to Comment No. 11: The ED responds that the TCEQ commissioners considered the petition for rulemaking on June 30, 2021 and ordered that the petition be denied because TCEQ’s existing rules on impingement and entrainment at desalination facilities under Texas Water Code, Chapter 18 are sufficient and the proposed new rules under Texas Water Code, Chapter 11 are unnecessary.

COMMENT NO. 12: An individual commented that TCEQ should be required to disclose all individuals involved in the preparation, review, and approval of the permit application. Those involved should be required to disclose their names and credentials qualifying their involvement with the permit application.

Response to Comment No. 12: The ED responds that ED staff do not prepare applications because applicants are responsible for preparing their applications. The ED's professional staff involved in the review of this application are identified in the application files, which were available online during the comment period and are currently available at TCEQ’s Office of the Chief Clerk.

COMMENT NO. 13: An individual asked whether the right to issue the permit should be reserved for the manager of the regional water supply.

Response to Comment No. 13: The ED responds that under Texas Water Code, Chapter 5, TCEQ has the authority to issue water rights permits.

COMMENT NO. 14: An individual commented that the water does not belong to the TCEQ or those involved with the applicant. An individual asked whether diverting water from Corpus Christi Bay would be stealing Waters of the United States.

Response to Comment No. 14: The ED responds that under Texas Water Code Section 11.021, the water of the ordinary flow, underflow, and tides of every flowing river, natural stream, and lake, and of every bay or arm of the Gulf of Mexico, and the storm water, floodwater, and rainwater of every river, natural stream, canyon, ravine, depression, and watershed in the state is the property of the state. Under Texas Water Code, Chapter 5, TCEQ has the authority to issue water rights permits for use of state water subject to TCEQ's water rights permitting statutes and rules.

COMMENT NO. 15: An individual commented that they support the permit and believe Corpus Christi needs engineering approaches to clean water because families will feel safer if the city is not constantly under a boil water notice. The individual also commented that the right engineering approaches should be used to prevent harm to wildlife and that smart technologies should be used to help provide the additional benefits of fresh drinking water.

Response to Comment No. 15: The ED acknowledges the comment.

COMMENT NO. 16: TCE commented that it is disappointing that the job of TCEQ is to "ensure compliance," not protect the environment. An individual commented that
TCEQ should change its mission statement or live by it and that the TCEQ mission statement does not align with granting the application. An individual commented that they hope TCEQ and the State of Texas can help guide us out of dependence on business as usual, which is unsustainable. An individual commented that TCEQ has a duty to regulate our environment and protect our resources. An individual commented that this application is the antithesis of what TCEQ stands for. The commenter stated that the TCEQ mission statement is inconsistent with granting this desalination permit application.

Response to Comment No. 16: The ED acknowledges the comments and responds that TCEQ continues to carry out its mission to protect our state’s public health and natural resources consistent with sustainable economic development. TCEQ staff followed applicable requirements in the Texas Water Code and TCEQ's rules in reviewing this application and developing their recommendations. Specifically, staff performed technical reviews for instream uses, hydrology, and water conservation as required by the Texas Water Code and applicable TCEQ rules. The ED believes that his proposed draft permit is protective of issues within TCEQ's jurisdiction over water rights permitting.

COMMENT NO. 17: TCE commented that POCCA should be accountable to residents of the region and follow through with their stated commitment to provide water only to entities that protect residents and the environment. Individual commenters stated that POCCA was not responsive to questions and concerns and that POCCA has not demonstrated accountability for the cost of the project or impacts of the project on local communities and the environment. An individual commented that POCCA is pursuing desalination for their customers and interests, that POCCA is aware that the community does not support the application, and that many of POCCA’s customers, representatives, and shareholders are not residents of the community, and will not be impacted. Individuals expressed concerns that POCCA has stated that the water would be for residents when it is actually for industry. An individual commented that POCCA stated that the San Patricio Municipal Water District would manage the water, asked if the desalination water would be mixed with the municipal water, asked what safeguards would be provided for residential water, and whether POCCA would decide who gets water during times of drought. An individual commented that POCCA has never been charged with constructing, managing, operating, and/or maintaining a desalination plant, and it does not have the authority, expertise, or mandate for such an operation. An individual commented that POCCA is identified as a wholesale water provider, and asked whether that is the job description of a navigation agency. An individual asked why POCCA is enticing energy intensive industries to Texas, since Texas is already drought-prone and hot. An individual commented that the Corpus Christi City Council disregarded resident concerns about pursuing desalination for heavy industrial use. A petition was circulated to compel the city to engage with residents about the impact of desalination. Despite the cancellation of all public events due to COVID, over 4,000 signatures were collected. An individual commented that Citizens Alliance for Fairness and Progress had to file a lawsuit to ensure that POCCA, the City of Corpus Christi, and TXDOT weren’t harming northside communities through the harbor bridge project. An individual asked why POCCA is applying for this permit and that the applicants should be the private industries that plan to use the desalinated water. An individual commented that POCCA doesn’t care about the citizens of Portland. An individual commented that POCCA is only doing the minimum
necessary for the design, construction, operation, and maintenance of this facility. An individual asked whether the Port will be in the water business and set prices for commercial and municipal use.

Response to Comment No. 17: The ED acknowledges the comments and responds that TCEQ’s role in the process is to evaluate the water rights application pursuant to applicable requirements. TCEQ has no role in or jurisdiction over the POCCA’s public information and decision-making processes or in determining what information POCCA provides to citizens.

COMMENT NO. 18: IOBCWA, TCE, and individual commenters expressed concerns about the amount of energy required to operate the project and effects on the Texas power grid. Individuals expressed concerns about grid failure during Winter Storm Uri. An individual expressed concerns that the energy required to operate the project would result in extensive water emissions causing damage to the environment and resident’s health. An individual commented that Texas is not part of the national grid, so the immense energy load cannot be shifted when output inevitably outpaces demand again amidst the ongoing climate crisis. An individual asked where the power to run this desalination plant will come from, whether the grid in Corpus Christi and surrounding cities is prepared for more power demand, whether the application addresses this, and asked how much power the plant will require.

Response to Comment No. 18: The ED acknowledges the comments and responds that TCEQ’s role in the process is to evaluate the water rights application pursuant to applicable requirements. The energy to operate the project and effects on the Texas power grid were not factors included in the application and were not considered in TCEQ staff’s review of the application under applicable TCEQ statutes and rules for water rights applications.

COMMENT NO. 19: IOBWCA and individual commenters expressed concerns about the impact of the project on Coastal Bend communities and commented that the Coastal Bend is an environmentally sensitive area worth protecting. IOBWCA commented that TCEQ should allow residents to continue to enjoy their quality of life. Individuals commented that state government needs to protect resident’s health and quality of life because the entire Coastal Bend’s way of life is threatened by this permit. Individuals expressed concerns that granting the application would result in social and economic issues in the local communities. Individuals commented that the project will cause damage to families and future generations. An individual commented that they have lived in the Corpus Christi area their entire life, and they rely on the water for many activities. An individual commented that coastal estuaries must be put first for recreation, preservation of public space, and people. An individual commented that a community first approach to more costly developments should be used.

COMMENT NO. 20: Individuals expressed concerns about the impacts of the project on air emissions and air quality and impacts to resident’s health.

COMMENT NO. 21: Individuals expressed concerns that the application is for industrial and not residential use. An individual commented that most of the desalinated water will be used by industry for cooling purposes.
COMMENT NO. 22: IOBCWA commented that industrial development would disproportionately penalize San Patricio and other surrounding counties with loss of water quality and air emissions. TCE and individual commenters expressed concerns about industrial development around Corpus Christi Bay because of impacts to resident’s health, air and water quality, tourism, livelihoods and the environment. TCE stated that the future of the Coastal Bend is at stake and that the proposed desalination plant would pave the way for a petrochemical industrial buildout resulting in increased pollution of the air, water, and land. TCEQ and individuals were concerned about health impacts such as cancer and asthma. Individuals expressed concerns that TCEQ is not looking at the total impacts of industrial expansion in the Corpus Christi Bay area. Individuals were opposed to the application because it was only for industry. An individual commented that affected communities, such as low-income, black, indigenous, and communities of color, are negatively impacted by local private industries. An individual commented that citizen action and input will increase in opposition to oil and gas development as a result of indigenous people’s issues, neighborhood environmental impacts and water challenges across the state. An individual commented that the significant water demands on the Corpus Christi area by heavy industry are not appropriate for the natural ecology and climate of the area. An individual commented that the region needs investments in renewable resources that benefit the entire community. An individual commented that industries should be paying to construct this plant, and for the pipelines to bring water from offshore and pump the brine back offshore. Individuals expressed concern about the pollution to land and water from the industrial users of the desalination plant, such as the petrochemical cracker plant producing plastics.

COMMENT NO. 23: TCE and individuals commented on the impacts of the permit on climate change. TCE commented that the increased industrial buildout would contribute to climate change. An individual commented that the fossil fuel industry, to which this desalination plant would contribute, is fast declining because of significant and rational concerns about the climate crisis. The commenter stated that climate change is a danger to Texans and people worldwide, and cited various natural disasters. An individual commented that the promise of jobs is a false promise as climate change will change industry capabilities. Individuals commented that solutions for the current climate disaster are needed. An individual commented that citizen action and input will increase in opposition to oil and gas development as a result of climate change and air challenges across the state.

Response to Comment Nos. 19 - 23: The ED acknowledges the comments and responds that industrial purposes of use are beneficial uses under applicable Texas Water Code provisions and TCEQ’s rules. The ED further responds that TCEQ staff performed technical reviews on this application for instream uses, hydrology, and water conservation as required by the Texas Water Code and applicable TCEQ rules. The ED believes that his proposed draft permit is protective of issues within TCEQ’s jurisdiction over water rights permitting.

COMMENT NO. 24: An individual commented that maintenance budgets for desalination plants near San Diego, California were expanded by ten times due to cleaning the pre-filters. An individual commented that existing desalination plants cause more damage than originally projected. An individual commented that
desalination research done elsewhere shows severe consequences may occur. TCEQ should research this and review environmental effects to make a reasonable decision.

Response to Comment No. 24: The ED responds that staff’s review of a water rights application is limited to specific requirements under applicable Texas statutes, rules, and the specific requests in the application.

TEXAS PARKS AND WILDLIFE

COMMENT NO. 25: TPWD commented that it is the agency with primary responsibility for protecting state fish and wildlife resources (Texas Parks and Wildlife Code § 12.0011(a)) in addition to encouraging outdoor recreation on Texas water resources. TPWD is charged with providing information on fish and wildlife resources to any local, state, and federal agencies or private organizations that make decisions affecting those resources (Texas Parks and Wildlife Code § 12.0011(b)(3)). TPWD said a written response to a TPWD recommendation for informational comment received by a state government agency may be required by state law. TPWD commented that Texas Parks and Wildlife Code Section 12.0011 may be used for further guidance. TPWD commented that one of the primary concerns about water use permit application No. 13630 is the lack of information or guidance on the diversion structure and efforts to minimize impingement and entrainment. A related matter is the high diversion rate for the project (140.12 cfs) and the potential resulting flow-through velocity for the diversion structure. The TPWD and Texas General Land Office coordinated on a report to identify zones appropriate for the diversion of marine seawater in the Gulf of Mexico, and for the discharge of desalination brine concentrate, while considering the need to protect marine organisms. The recommendations for limiting impingement and entrainment for diversions include:

- limiting seawater flow-through velocities to 0.5 feet per second (fps), and
- limiting combined impacts in the surrounding approach area to 0.5 fps;
  - adjusting intake structure design with varying flows and water quality that may occur at the intake site;
  - designing intake structures to reduce the flow velocity so that marine organisms may escape being drawn into the intake;
  - excluding organisms from the intake using screens, booms, or both; and
  - conducting a site-specific study of conditions at the proposed intake location to identify marine organisms at risk from intake operations and to inform the design planning process.

In addition, when feasible, directional drilling to install piping below the seabed and drawing water down through a sandy bottom will prevent impingement of marine organisms on intake screens exposed to open water and prevent entrainment of other organisms carried with the feedwater through the intake screen. TPWD expressed appreciation for the opportunity to provide comment on this application.
Response to Comment No. 25: The ED responds to the comments from TPWD and notes that this written response to those comments is timely under Texas Parks and Wildlife Code § 12.0011 because it is within 90 days of the agency taking action by responding to all timely public comments on the application. The ED responds that the study cited by the TPWD in its comments does not apply to this application because the application was not submitted under Texas Water Code Chapter 18. The ED responds that the proposed draft permit has not been revised because the ED believes the special conditions included in the draft permit are sufficiently protective of aquatic resources and because requests for a contested case hearing on this application have been filed.

WASTEWATER PERMITTING

COMMENT NO. 26: Individuals expressed concerns that the discharge associated with the desalination plant would impact marine life, the ecosystem, the economy, and create irreversible environmental consequences to the channel and to Corpus Christi Bay. An individual commented that there have not been enough independent studies on the erosion and re-sedimentation that will occur with the discharge. Individuals expressed concern about sludge from pretreatment and an individual commented that information for planning sludge disposal should be made available. An individual commented that there have been no studies on the impact of the discharge of brine waste into the ecologically delicate bay. IOBCWA commented that the cooling water rules for industries are not being taken into account. An individual commented that information on desalination intake and discharge is needed if POCCA moves forward with a desalination project in a closed bay system, as opposed to offshore. An individual commented that Corpus Christi Bay is a closed bay system and should never be subjected to desalination discharge. An individual commented that not enough attention has been paid to the discharge back into the bay. There is nothing regulated, or included in the proposed plan, to protect the bay, citizens, and marine life from the adverse effects of desalination discharge. An individual asked where the brine discharge is being sent and if the applicant would adequately address the issues caused by brine discharge. An individual commented that if a desalination plant were to come to south Texas, the salt should not be deposited back in anywhere close and should be taken offshore at least 10 miles. An individual commented that the size of the project will destroy marine life since there is no measure regarding the sludge load.

COMMENT NO. 27: IOBCWA commented that the desalination process will contaminate nearby waters and that reject water will contain large concentrations of brine that will kill and injure nearby aquatic life. IOBCWA commented that the discharged wastewater will potentially contain chemicals associated with the reverse osmosis process, including scale inhibitors, acids, coagulants, ferric chloride, flocculents, cationic polymer, chlorines, bisulfites and hydrogen peroxides, as well as heavy metals from contact with the plant machinery. These substances would all be potentially damaging to the nearby wildlife. In addition, the facility will create tremendous amounts of solid waste requiring transport and disposal, endangering nearby communities.

COMMENT NO. 28: An individual commented that Harte Research Institute scientists found increasing salinity in central Texas coastal estuaries in 2020. The brine discharge from the proposed desalination plant will further increase salinity in Corpus
Christi Bay, harming sensitive fish and aquatic life. The commenter said that scientists also found significant annual increases in salinity at four sites in Corpus Christi Bay, which affects marine organisms that are sensitive to high salinities. Additionally, increasing red tides in the Corpus Christi area may be tied to documented long-term increases in salinity levels in the Nueces Estuary system. Anything increasing the salinity of the bay may create more conducive conditions for red tide.

Response to Comment Nos. 26 - 28: The ED acknowledges the comments and reiterates that issues related to POCCA’s pending wastewater application and any associated discharge were not considered in TCEQ staff’s review of the water right application under applicable TCEQ statutes and rules for water rights. The ED also notes that POCCA’s pending TCEQ wastewater permit application is a separate authorization being processed separately from this pending water rights application.

WATER PLANNING

COMMENT NO. 29: An individual expressed concerns about the volume of water for industrial use and the rate at which industry is using potable water. An individual expressed concerns that the intended users of water were not identified and that there were no restrictions on water to new industries during severe drought. An individual expressed concerns about the impacts of the application on regional water supply for the public since the water from the water right would be going to a limited group of industries. An individual commented that this project is not intended to help the populations need for water, it is a cloak for industrial needs.

COMMENT NO. 30: An individual commented that the application is not for water to help with drought or water shortages, and if not for industries wanting to move to the area, the water would not be needed.

COMMENT NO. 31: TCE commented that it has been clear from the initial application that this water is for industrial use, yet POCCA has stated that this water is for everyone. TCE further commented that the proposed permit for desalination is not intended to support the people who live here but is being demanded by water intensive industries.

COMMENT NO. 32: An individual was concerned about 90.5 million gallons of water per day being drawn at the rate of 62,890 gallons per minute, to provide fresh water for industry that is not yet located in the Coastal Bend and not residential use.

COMMENT NO. 33: IOBCWA commented that there is no clear necessity for this desalination project.

COMMENT NO. 34: An individual commented that the Applicant is relying on the approved Regional Water Plan for Region N as proof that desalination is desired by Coastal Bend residents. Significant concerns about desalination were raised during that public process, but community opposition was not acknowledged in the final version.
COMMENT NO. 35: An individual commented that there are many less risky and less expensive water resources than baywater desalination. The Regional Water Plan for Region N makes it clear that this is not needed due to population growth.

COMMENT NO. 36: The City of Portland commented that the application does not demonstrate consistency with regional water planning criteria relating to evaluation of brine concentrate disposal issues. The commenter also said that the application doesn’t demonstrate compliance with 30 Tex. Admin. Code § 297.202(6) because it doesn’t demonstrate compliance with the state water plan and the relevant regional water plan. The Regional Water Plan mentioned in the application has been superseded by the 2021 Regional Water Plan. Compliance with a draft plan, as stated in an interoffice memorandum between TCEQ staff, does not constitute compliance with an approved plan as required by rule.

COMMENT No. 37: The City of Portland commented that the application's compliance with 30 Tex. Admin. Code § 288.5 relating to water conservation plans for wholesale water suppliers, and with 30 Tex. Admin. Code § 297.202(3) requiring that water use be intended for a beneficial use, is abrogated by the suspension of processing the wastewater discharge permit application for the desalination plant. The commenter's statements about the Applicant's wastewater discharge permit application include: the wastewater discharge permit application WQ0005254000 was indefinitely suspended by TCEQ in response to the applicants request to put it on hold to allow time for them to conduct a feasibility study on alternative strategies for brine disposal; this will result in substantial changes and adverse regulatory consequences for the application due to the interdependent nature of the two permits; the suspension of the application for the wastewater discharge permit casts doubts on the projects future, making the water use in the application speculative at best; the suspension also impedes the ability of TCEQ to determine that water use is intended for beneficial use, and that seawater diversion will be treated in accordance with the rules.

COMMENT NO. 38: IOBCWA commented that the application is not consistent with the 2016 Coastal Bend Regional Water Plan.

COMMENT NO. 39: An individual commented that since this desalination plant has been listed as a "recommended water strategy" in the 2021 Region N Water Plan, they expect that POCCA will try to get a low-interest loan from the Texas Water Development Board to construct the plant. The commenter questioned whether public funds could support private industry and who would pay back the loan.

COMMENT NO. 40: An individual expressed concerns that the permit would be issued to the applicant in perpetuity despite lack of planning.

Response to Comment Nos. 29 - 40: The ED acknowledges the comments and notes that Regional Water Planning Groups and the Texas Water Development Board are responsible for developing Texas’ Regional and State Water Plans. TCEQ staff performed a water conservation review pursuant to applicable TCEQ requirements and determined that the application is consistent with the 2016 Region N Water Plan and the 2017 State Water Plan. In addition, TCEQ staff also reviewed the draft 2021 State Water Plan and considered information provided by the Region N Planning Group in making its consistency decision. TCEQ has no role in or
jurisdiction over the recommendations or decisions of the Regional Planning groups.

COMMENT NO. 41: An individual commented that none of the proposed desalination strategies in the Regional Water Plan for Region N took advantage of the TCEQ expedited rules process.

Response to Comment No. 41: The ED responds that House Bill 2031 (84th Legislative Session) created an alternative expedited process in Texas Water Code, Chapter 18 for obtaining an authorization to divert marine seawater and did not affect the authority of a person to divert marine seawater from a bay or estuary under Texas Water Code, Chapter 11. The ED has no role in an applicant's decision to submit an application under the expedited process in Chapter 18 or under TCEQ’s authority to issue a water right under Chapter 11. TCEQ has no role in or jurisdiction over the recommendations or decisions of the Regional Planning groups.

ALTERNATIVES TO THE APPLICATION

COMMENT NO. 42: Individuals expressed concerns about the location of the diversion point and stated the diversion point should be located offshore and not in a closed bay system. An individual commented that there is not enough water circulation in La Quinta Channel to properly dispense the brine discharge, resulting in a more hypersaline bay.

COMMENT NO. 43: TCE and an individual commented that water reuse, water efficiency, and groundwater should be used instead of desalination. An individual commented that conservation techniques should be used.

COMMENT NO. 44: IOBCWA commented that designing the desalination facility with intake and discharge offshore is the only logical solution, and is endorsed by Texas Parks and Wildlife, University of Texas Marine Science Institute, Harte Institute, and other scientists. IOBWCA further comments that they are unaware of other desalination facilities located in a closed system with little circulation and the turbidity levels of bay water.

COMMENT NO. 45: IOBWCA commented that if desalination is pursued, it should be in brackish water where there are billions of gallons. Evangeline Formation has 25 million gallons a day deliverable.

COMMENT NO. 46: Individuals commented that the location of the diversion point should be based on science. Individuals commented that scientists from the Harte Research Institute, the UT Marine Science Institute, the General Land Office and Texas Parks & Wildlife Department recommended that desalination intake and discharge occur only in designated areas offshore in the Gulf.

COMMENT NO. 47: An individual commented that industry should research better ways to capture and store rainwater, or use brackish water which would be more sustainable.
COMMENT NO. 48: An individual commented that there are miles of abandoned pipelines that go out of the bay that could be utilized throughout the bay system to go to deep water to protect the bay system and estuaries. The commenter urged TCEQ and POCCA to see how deep the water is before the diversion point is constructed.

COMMENT NO. 49: An individual commented that diverting large volumes of water from inshore sources such as Corpus Christi Bay and the ship channel will have long-term adverse effects on flows and salinity. The individual also commented that discharging brine in the same general location would potentially compound the problem. The preferable approach is for both water intake and brine discharge to be located offshore.

COMMENT NO. 50: An individual commented that the location of the intake structure is too close to residential areas and will have a negative impact on the environment and the community.

Response to Comment Nos. 42 - 50: The ED acknowledges the comments and responds that TCEQ staff’s review of a water rights application is limited to specific requirements under applicable statutes and rules based on the specific requests in the application. The suggested alternatives were not submitted as part of the City’s application.

COST OF THE PROJECT

COMMENT NO. 51: TCE commented that desalination plants are costly. An individual commented that the energy needed to operate this water intake system will be extremely expensive, further burdening already overburdened residential water rate payers in the area. An individual commented that existing desalination plants cost residents more than originally projected.

COMMENT NO. 52: An individual asked about the operating costs for maintaining the intake pipe and screens and about how much will residential water bills increase.

Response to Comment Nos. 51 - 52: The ED acknowledges these comments but responds that the cost of the project was not considered in TCEQ staff’s review of the application under applicable TCEQ statutes and rules. The ED notes that issues related to project costs are presented during the regional planning process.

ECONOMIC IMPACTS

COMMENT NO. 53: Individuals expressed concerns about the economic impacts of granting the application. An individual commented that Corpus Christi Bay is a vital part of the recreation and economy of the area. An individual commented that the cost deferred to the community and to support corporate welfare is unknown. Individuals were concerned that local businesses would close and that the number of jobs moving to the area were exaggerated.

COMMENT NO. 54: Individuals expressed concerns about increases in taxes, water rates and residential utility bills, and property devaluation.
COMMENT NO. 55: Individuals expressed concerns about impacts to their businesses if the application is granted. An individual commented that the proposed desalination plants for Corpus Christi Bay pose a direct threat to their business leading eco tours as a professional kayaking guide and that tourism is the second largest contributor to the local economy. An individual commented that as a marina operator in Ingleside on the Bay, they have serious concerns about how a desalination plant could harm their business. This commenter stated that they are a small operation providing affordable slips to everyday boaters as a community marina, not a big yacht club and they also have a small apartment building offering safe, affordable housing, and Ingleside on the Bay’s only restaurant.

COMMENT NO. 56: An individual commented that the landscape has completely changed because of heavy industry. There are giant flares that blow pollution into the air, day and night. Many stretches of water can no longer be seen, due to giant containment berms built to capture potential oil spills. The noise, bangs, explosions, blasts, foul odors, and heavy industrial traffic are making their business and community less desirable.

COMMENT NO. 57: An individual commented that their neighbors have a fishing business, and they are concerned about loss of income and economic harm because of the impacts of the application on aquatic life.

COMMENT NO. 58: An individual expressed concerns about impacts to commercial shrimping.

COMMENT NO. 59: An individual commented that there will need to be excavations of considerable size and magnitude to accommodate the intake equipment installation. The commenter asked how residents and other interested parties can be certain that excavations will not adversely impact existing shoreline structures and homes, including during threatening weather conditions. The individual asked whether TCEQ would compensate those who have their entire life’s savings and dreams invested in coastal properties.

**Response to Comment Nos. 53 - 59:** The ED responds that TCEQ staff's review of water rights applications does not require consideration of economic impacts. The TCEQ's jurisdiction over water rights permitting is established by the Legislature. Economic impacts to property taxes, land valuation, business interests, and other such matters are not within the TCEQ's statutorily established jurisdiction over water rights permitting.

**WATER RIGHTS PERMIT APPLICATION**

COMMENT NO. 60: IOBCWA commented that the application does not state the purpose of use in definite terms because “industrial use” lacks the required specificity. IOBWCA further commented that identifying the place of use as San Patricio County is too vague.

COMMENT NO. 61: IOBCWA commented that the application did not state the location of the discharge, the location of return flows after industrial use of the diverted water, and the quantity of return flows.
COMMENT NO. 62: An individual expressed concern that there are no rules to regulate this kind of a permit, despite being water rights and a project of great magnitude. Only the inlet screens and velocity will be regulated.

COMMENT NO. 63: Individuals commented that TCEQ should not grant speculative permits.

COMMENT NO. 64: An individual requested that the application be withdrawn immediately due to a lack of technical content, and deficient information for the public and TCEQ to determine adverse ecological and socio-economic impacts.

Response to Comment Nos. 60 - 64: The ED responds that the proposed draft permit complies with Texas Water Code, Chapter 11 and TCEQ's rules in 30 Texas Administrative Code Chapters 288, 295, 297 and 298, which are the applicable statutes and rules relating to water rights and water rights permitting.

ENVIRONMENTAL CONCERNS

COMMENT NO. 65: Individual commenters expressed concerns about environmental issues related to the application. Individuals were concerned about the effects of the application on Corpus Christi Bay and that the application would destroy the bay. An individual commented that desalination facilities around the world have encountered unintended consequences with dead zones all too common. Individuals expressed concern about the impacts to marine life that are an important part of the ecosystem. An individual commented that no studies were done on the ecosystems, marine life, or micro-organisms. An individual commented that the bay’s ecological system is too delicate for a project this destructive. An individual commented that the project will damage the smallest creatures and the eggs, larvae, plankton, and other microscopic organisms that exist in the bay. An individual commented that before this permit is issued, additional ecological impacts have to be seriously evaluated, with transparency for all who call this area home, and with a community first approach to more costly developments. An individual commented that not enough studies have been done to know how water quality will be impacted.

COMMENT NO. 66: An individual commented that they are concerned that the Port plans to put its intake and discharge structures within the same area that is being leased to industry for seagrass mitigation projects and expressed concerns that the intake structure would not support the creation of seagrass colonies. An individual asked whether the application says anything about protecting plant life because sea grasses form a vital part of the food chain. An individual commented that there are over 200 species of fish in Corpus Christi Bay and over 400 species of birds that live there or migrate through seasonally. The Coastal Bend is one of the most popular birding areas in the country. A major risk of this desalination project is the excess salinity in a closed bay system which will stress sea grasses at the base of the food chain. All life in the bay depends on these seagrasses, and the loss of one species would cause the demise of other species. Biodiversity loss poses a fundamental risk to human well-being.

COMMENT NO. 67: An individual commented that the application states that information to characterize hydrodynamic conditions of this area of Corpus Christi
Bay is limited because no study has been done. The individual requested this application be denied for lack of study and science necessary to make an informed, planned, and safe decision.

COMMENT NO. 68: An individual commented that TCEQ should consider the impact caused by the combination of two desalination plants in the same bay system (the Inner Harbor and the La Quinta). TCEQ should consider how the runoff from more industry will negatively impact the bay.

COMMENT NO. 69: An individual commented that most of the damage caused by pollution from the desalination plant will occur in Corpus Christi Bay, however the negative environmental impacts will reach the gulf, similar to what occurred with San Diego and the Pacific Coast due to the Poseidon desalination plant. The intake will create environmental issues in the bay and gulf that should be researched and addressed.

COMMENT NO. 70: An individual commented that dredging will create environmental issues in the bay and gulf that should be researched and addressed.

COMMENT NO. 71: An individual commented that the desalination project will pollute and threaten marine life in the bay, and around the gulf for future generations to come.

COMMENT NO. 72: An individual requested an environmental impact study to assess the consequences of desalinization on aquatic flora and fauna, and the human exposure to toxic chemicals utilized by the desalination process.

COMMENT NO. 73: An individual commented that the bay system is connected to La Quinta Channel, which is connected to the Nueces River and the Gulf of Mexico as one water body, and should be protected as such.

COMMENT NO. 74: An individual commented that TCEQ should see the January 2022 Coastal Bend Bays & Estuaries Program report written by scientists from Harte Research Institute for Gulf of Mexico Studies. It states there is concern about rising salinities in the Coastal Bend region of Texas due to long-term changes like increasing temperature that increases evaporation, reduced freshwater inflow that provides less seawater dilution potential, and industrial brine discharges. The Corpus Christi Bay region has high annual average wind speeds, temperatures, and salinities, and circulation in the region is sluggish. This means that the region is sensitive to changes in water borne materials because they are easily concentrated by high evaporation rates, and hard to disperse due to low flushing rates. Overall community diversity is related to salinity, and as it increases past the optimal range, species diversity declines. The most sensitive species to salinity increases were Blue Crab, Atlantic Croaker, and White Shrimp. Since salinity is already at levels that could impact species abundance and diversity, small increases could add additional pressure to the system.

COMMENT NO. 75: An individual commented that they oppose desalination plants because sea turtles are in danger.
COMMENT NO. 76: IOBCWA commented TCEQ should consider the ecology and productivity of the affected bay and estuary system in determining whether to issue a water right. The area surrounding the proposed intake location is a rich and productive portion of the Corpus Christi Bay and estuary system. In fact, under the Texas Water Quality Standards, the source waters have been characterized as used for exceptional aquatic life uses. The draft permit fails to protect the ecology and productivity for the impacted bay and estuary system, and fails to maintain existing uses of the impacted source water.

COMMENT NO. 77: An individual commented that as a fishing guide and lifelong outdoorsman, they have learned about water quality and the need for quality wildlife habitats. The commenter said they have witnessed environmental changes from increasing human impact, such as "tanker tides," which disrupt natural tides. The commenter said they have seen fishery growth during periods of rain, due to natural freshwater influx. Since the bays and estuaries are hypersaline, even one desalination facility on the Texas Coast would have impacts on native flora and fauna.

Response to Comment Nos. 65 - 77: The ED acknowledges these comments and responds that TCEQ staff’s review of the application included an evaluation of environmental impacts associated with the application in accordance with applicable Texas statutes and TCEQ's rules related to water rights permitting.

COMMENT NO. 78: Individuals expressed concerns about impacts on water quality and pollution in Corpus Christi bay. Individuals expressed concerns about impacts to marine life and wildlife in, on, and around Corpus Christi Bay. An individual expressed concerns about continuing impacts to the ecosystem in the area in the future. An individual expressed concerns about low water levels. An individual commented that additional ecological impacts should be evaluated before the permit is issued. An individual commented that environmental assessments should be performed by third party organizations with no monetary or political affiliation with the City of Corpus Christi or POCCA. An individual commented about the location of the intake and the effects of currents and tides. An individual expressed concerns about possible health effects from the chemicals used in the desalination process, including during pre-treatment. An individual expressed concern about a 200 by 200 foot hole being trenched twenty feet deep.

Response to Comment No. 78: The ED acknowledges these concerns and responds that TCEQ staff’s review of the application included an evaluation of environmental impacts associated with the application. TCEQ staff’s environmental review was performed in accordance with applicable Texas statutes and TCEQ's rules related to water rights permitting. The ED’s proposed draft permit includes special conditions to protect the environment, including a provision requiring screens on the intake structure. The ED believes that the proposed draft permit is protective of the environment.

IMPINGEMENT AND ENTRAINMENT

COMMENT NO. 79: IOBCWA and individuals expressed concerns about impingement and entrainment of aquatic organisms. An individual expressed concern about marine life getting through the quarter-inch mesh screen to the pump and being killed.
because no mortality rates have been presented. An individual disagreed that only algae would get through the quarter-inch mesh screen and stated that a biocube should be used to identify and quantify larval and microscopic organisms that would be lost due to the desalination process. Individuals expressed concerns about the velocities at the intake. An individual commented that no studies have been released on the impact that intake and suction would have on wildlife, including microscopic organisms like plankton, small fish and eggs, and algae. An individual commented that subsurface infiltration galleries should be used to prevent any entrapment of marine life. Individuals expressed concerns about impacts on microorganisms and species higher up the food chain which could disrupt the bay ecosystem and result in fish kills, algae blooms, or more frequent red tides. An individual commented that locating the intake in La Quinta Channel will be problematic because it will result in impingement and entrainment of organisms, particularly benthic organisms, which would consequently threaten the sporting fish in Corpus Christi Bay, which feed on benthic organisms. An individual commented that TCEQ’s proposed reasonable measures to reduce impacts from impingement and entrainment do not take into account sea larvae, which are microscopic.

COMMENT NO. 80: An individual commented that TCEQ has no rules or guidelines to prevent impingement and entrainment of aquatic species in La Quinta Channel. The draft permit only requires that the applicant adopt "reasonable measures" to prevent impingement and entrainment, but does not define what those reasonable measures are. The commenter asked how TCEQ would enforce the provision if the requirement is not defined.

COMMENT NO. 81: An individual commented that the intake facility has a high probability of detrimentally affecting marine life and sustainability of the aquatic ecosystem, based on peer-reviewed studies. The individual referenced a paper by the Harte Research Institute which listed the La Quinta Channel site as the “most environmentally diverse” location and the wedge wire screen intake as the “least favorable” option. The report states that the area near the proposed intake has seagrass habitats, fishing nursery habitats, and other areas that are important for marine life. The large amount of water that POCCA plans to divert forces this project to use the most destructive type of intake structure listed, shown to have a 100% fatality rate of impinged and entrapped species.

COMMENT NO. 82: An individual commented that TCEQ does not have guidelines for seawater intake along the gulf coast, only brackish water guidelines for inland, so this application does not reflect actual conditions because there are no guides. The only guide is a study which recommends that intakes be locate offshore.

COMMENT NO. 83: An individual expressed concern about the risk of the intake to aquatic life and shore birds, despite comments made on the safety of the quarter inch mesh.

COMMENT NO. 84: An individual commented that there is marine life present that provides many with food and recreational opportunities. The commenter stated that fifty to eighty percent of oxygen production on Earth comes from the ocean, mainly from photosynthetic organisms like oceanic plankton and algae, and other cyanobacteria that sequester carbon. These species should not be compromised,
because they contribute to regulation of oxygen and nutrients throughout the environment and atmosphere. Phytoplankton should be considered even though they are less than a quarter-inch and will go through the intake pipes.

COMMENT NO. 85: An individual commented that impingement and entrainment are concerns linked with intake structures. According to a study by the Harte Research Institute, impingement of fish, marine mammals, and sea turtles can reduce the spawning stock due to increased mortality. Entrainment of smaller invertebrate larvae, fish larvae, and eggs can reduce recruitment. The Harte Research Institute recommended subsurface directional drilled or subsurface infiltration gallery intakes.

COMMENT NO. 86: An individual commented that the local scientific community has established that crustaceans and fish native only to these waters would easily slip through the openings of the proposed protective screens. According to the engineering firm that prepared this application, the screens are intended to comply with the "Fish Protection Standards," but there is more than just fish living in the bay. The application describes the velocity at the intake, but the force at which organisms will slam into the screens and walls of the equipment is what we need to know. The information provided in the application is insufficient.

COMMENT NO. 87: IOBCWA commented that the facility is located near Spoil Island in an area of special biological importance for critical commercial and sports fishing species. Valuable seagrass habitats are present in this area. There is a significant forage base present in the area that is ecologically important for commercial and sports fishing species, and food for important species is currently plentiful in the immediate area of the proposed intake. Commercially important species that use this area include Blue Crab, shrimp and important fish species including flounder. Other species present that are important for recreational fishing include Spotted Sea Trout and Croaker. The intake is proposed to be located near sensitive nursery habitat and other areas that are important for a variety of marine life, including possible feeding areas for sea turtles and nesting sites for colonial waterbirds. Spoil Island also has the potential to be a feeding and resting place for migrating birds, including the federally endangered Piping Plover.

COMMENT NO. 88: IOBCWA commented that the location and design of the intake facility particularly does not appropriately consider the proposed location of the facility in an ecologically sensitive area utilized by important commercial and sports species. IOBCWA further commented that the screen intake velocity is inadequate to prevent impingement and entrainment of species members that are planktonic or in larval stages that are not capable of escaping the current induced by the intake structures. POCCA intends to use wedgewire screens at the intake structures, which will result in significant entrainment of larval stage commercially and recreationally important aquatic species, and will also result in impingement of juvenile members of commercially and recreationally important aquatic species.

Response to Comment Nos. 79 - 88: The ED responds that TCEQ staff’s review of the application included an evaluation of environmental impacts associated with the application in accordance with applicable Texas statutes and TCEQ’s rules related to water rights permitting. The ED’s draft permit includes a special condition requiring POCCA to implement reasonable measures to reduce impacts to
aquatic resources due to impingement and entrainment, and requires those measures to include, but not be limited to, screens on the diversion structure.

RECREATION

COMMENT NO. 89: IOBCWA and individuals expressed concerns about impacts of the application on recreation, access to public waters, and safety. Individuals commented on impacts to kiteboarding, fishing, kayaking, swimming, walking, bird watching, boating, enjoyment of nature, surfing, water sports, and other recreational activities near the location of the diversion point.

COMMENT NO. 90: An individual commented that the environmental and tourism asset that the ecosystem provides can be cultivated responsibly and with foresight to spread the success and prosperity to all who call that area home.

Response to Comment Nos. 89 - 90: The ED acknowledges the comments and responds that TCEQ staff’s review of the application did not consider impacts to recreational uses in the area of the application. The TCEQ’s jurisdiction over water rights permitting is established by the Legislature. The issues raised by the commenters are not within the TCEQ’s statutorily established jurisdiction over water rights permitting.

CULTURAL RESOURCES

COMMENT NO. 91: An individual raised concerns about the location being Indigenous Karankawa land. Indigenous people and lands have already faced enough exploitation. An individual commented that Native people have an inherent right to protect the land, air, water, and life on these lands and that there are three recognized tribes in Texas who should be part of the consultation on these projects but no proper consultation has been done. An individual commented that this is known ancestral territory of the Karankawa and other tribal peoples who are spiritually connected to this water.

Response to Comment No. 91: The ED acknowledges the comments and responds that when reviewing water rights applications, the TCEQ considers only the criteria within its jurisdiction as set forth in applicable statutes and rules governing water rights.
Respectfully submitted,

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