Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 30, 2021 9:18 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630
Attachments: 2021.03.29 IOB Comments on WRPERM 13630.pdf

H

From: katie@txenvirolaw.com <katie@txenvirolaw.com>
Sent: Monday, March 29, 2021 4:34 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Eric Allmon

E-MAIL: katie@txenvirolaw.com

COMPANY: Perales, Allmon & Ice, P.C.

ADDRESS: 1206 SAN ANTONIO ST
AUSTIN TX 78701-1834

PHONE: 5124696000

FAX:

COMMENTS: Please see the attached document.

PERALES, ALLMON & ICE, P.C.

ATTORNEYS AT LAW
1206 San Antonio Street
Austin, Texas 78701
(512) 469-6000 · (512) 482-9346 (facsimile)
info@txenvirolaw.com

Of Counsel:
David Frederick
Richard Lowerre
Brad Rockwell

March 29, 2021

Laurie Gharis
Chief Clerk, MC-105
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: Comments and Hearing Request regarding Application of Port of Corpus Christi Authority of Nueces County for Water Rights Permit No. 13630.

Ms. Gharis:

I am writing you on behalf of Ingleside on the Bay Coastal Watch Association (IOBCWA) regarding the Application of the Port of Corpus Christi Authority of Nueces County ("PCCA") for Water Rights Permit No. 13630. For the reasons set forth herein, the Application should be denied. If the Application is not denied, IOBCWA requests a contested case hearing regarding the application. IOBCWA may be contacted through the address and telephone number identified above.

I. IOBCWA is an Affected Person

IOBCWA satisfies TCEQ's rules regarding associational standing. That is, one or more members of the association would have standing to request a hearing in their own right; the interests the association seeks to protect are germane to the association's purpose; and neither the claim asserted nor the relief requested requires the participation of the individual members in the case.

Patrick Nye is the President of IOBCWA's board of directors. He has submitted comments to TCEQ, which are incorporated herein by reference.

Encarnacion Serna is a member of IOBCWA. He resides at 105 Lost Creek Drive, Portland, Texas. He has lived at this residence with his wife for over 20 years. His property is less than 1 mile from the proposed facility intake. In addition to his property interest,

Mr. Serna enjoys fishing, swimming, and kayaking in the bay, near his property. Mr. Serna often catches fish that he and his family, including 10 grandchildren who frequently visit, consume. The proximity of Mr. Serna's property interest to the proposed facility intake and his history of fishing and recreating near the proposed facility are personal justiciable interests; these interests will be impacted by the proposed facility to the extent the facility impacts fish and wildlife habitat and the ecology and productivity of the bay. His interests will be impacted in a manner not common to members of the general public. Mr. Serna has submitted additional comments to TCEQ, and those comments are incorporated here by reference.

Similarly, Uneeda Laitinen, another member of IOBCWA, resides with her husband at 102 Markham Place, Portland, Texas—less than 1 mile of the proposed facility intake. She too has submitted comments to TCEQ, and those comments are incorporated here by reference. Ms. Laitinen has resided at her residence for about 10 years. Ms. Laitinen's property is right along the bay and near Bayside Park. She enjoys bird-watching from her property, and her husband enjoys fishing in the bay regularly. He often catches fish such as redfish, trout, and flounder, which he and Ms. Laitinen consume and which he shares with nearby residents. The proximity of Ms. Laitinen's property interest to the proposed facility intake and her husband's history of fishing near the proposed facility are personal justiciable interests; these interests will be impacted by the proposed facility to the extent the facility impacts fish and wildlife habitat and the ecology and productivity of the bay. Ms. Laitinen's, like Mr. Serna's, are personal justiciable interests that will be impacted by the proposed facility in a manner not common to members of the general public.

Captain Daniel Wilkerson is also a member of IOBCWA. He too has submitted comments to TCEQ, and those comments are incorporated by reference herein. Captain Wilkerson is the owner and operator of Family Fishing Charters. Captain Wilkerson is a fishing guide. Three to four times per week, he takes, on average, about 4 individuals fishing along the bay, including in the area near the proposed facility intake. Captain Wilkerson also regularly fishes in the bay with his family. He often catches redfish and trout, which he and his family consume. He and his family also frequent Bayside Park, where they observe dolphins and fish off of the dock at the Park. Captain Wilkerson has expended significant resources to purchase the equipment necessary for his business, including a boat and fishing equipment. The success of his business depends, in large part, on the bay's ecological health and productivity. Captain Wilkerson's business would be impacted by the proposed facility to the extent it impacts fish and wildlife habitat and the ecology and productivity of the bay. Captain Wilkerson's economic interests, together with his recreational interests, are personal justiciable interests that would be impacted by the proposed facility, if permitted, in a manner not common to members of the general public.

Similarly, Captain Chip Harmon is also a member of IOBCWA. He too is a fishing guide and owns a convenience and fishing tackle retail store—Fireside Market, located at 1297 S. Main, Ingleside, Texas. Captain Harmon, like Captain Wilkerson, regularly serves as a fishing guide, taking about 4 individuals fishing along the bay, including in the area near the proposed facility intake. Captain Harmon also regularly fishes in the bay. He often catches redfish, trout, and flounder, which he and his family consume. The success of Captain Harmon's business depends, in large part, on the bay's ecological health and productivity. Captain Harmon's business would be impacted by the proposed facility to the extent it impacts fish and wildlife habitat and the ecology and productivity of the bay. Captain Harmon's economic interests, together with his recreational interests, are personal justiciable interests that would be impacted by the proposed facility, if permitted, in a manner not common to members of the general public.

The interests the association seeks to protect are germane to IOBCWA's purpose. IOBCWA is a 501(c)(3) nonprofit corporation, whose purpose, as described in its bylaws, is as follows: to promote the health, safety, and quality of life for residents, property owners, business operators, volunteers for, or employees of Ingleside on the Bay or in Ingleside Cove, located at the convergence of the Corpus Christi and La Quinta Ship Channels, on Corpus Christi Bay. With this purpose as the focus, IOBCWA intends to represent its members by participating in the TCEQ decision-making process.

Finally, neither the claim asserted nor the relief requested—denial of Permit No. 13630—requires participation of the individual members of IOBCWA.

II. The Application does not contain information on the purpose and location of use as required by 30 TAC 295.5.

The purpose of the use of the water is not stated in definite terms as required by 30 TAC § 295.5, nor is the location of use sufficiently stated. Within the application, the purpose of use is solely listed as "industrial", which lacks the level of specificity required. Furthermore, the place of use is merely identified as "San Patricio County." San Patricio County encompasses an area of 708 square miles, so such a vague description does not constitute a definite identification of the place of use for the water. For these reasons, the information required by 30 TAC § 295.5 has not been provided.

III. The Application does not contain the required information regarding return and surplus flows.

TCEQ rules also require that the application describe the location of return or surplus flows, as well as requiring that an application, "shall state with as much accuracy as possible the quantity of return flow expressed in acre-feet per annum." (30 TAC §

295.8). In this case, much of the water will be rejected as a byproduct of the desalination process, and significant quantities of the water will be discharged after industrial use for purposes such as cooling. Yet, the location of the desalination reject water discharge is not identified in the application, the location of return water flows after industrial use are not shown in the application, and the quantity of return flows are not provided in the application. In this manner, the application does not contain the information required by 30 TAC § 295.8.

IV. The Application has not demonstrated consistency with the State and Regional Water Plan.

PCCA also has not shown that the proposed project addresses a water supply need in a manner that is consistent with the state water plan and applicable approved regional water plan. As noted, the application states that the place of use for the water is San Patricio County for manufacturing and power needs. The 2016 Coastal Bend Regional Water Plan identifies that in 2070, San Patricio County will have a projected shortage of 18,000 acre-feet per year for manufacturing, and no demand for steam-electric water uses, which is equivalent to a total shortfall of 16.5 million gallons per day.[1] In order to meet that demand in San Patricio County, the Regional Water Plan provides for a diversified strategy of obtaining 18,529 acre-feet per year through improvements to the San Patricio Industrial Water Treatment Plan, another 8,000 acre-feet per year from increased supply from the Guadalupe Blanco River Authority, and 2,240 acre-feet per year from the Portland Reuse Pipeline, and only 9,000 acre-feet per year (8.0 MGD) from all seawater desalination.[2] PCCA's plan to supply 30.0 MGD to San Patricio County is not consistent with this regional water plan for the area. That quantity of water is simply not needed. Furthermore, the Regional Plan is also clear that the unit cost of water from seawater desalination is the most expensive alternative available.[3] It is unrealistic to assume that the manufacturing sector of San Patricio County would obtain water from PCCA's desalination project rather than utilize water from the less expensive options identified in the plan. Furthermore, the sole desalination strategy identified in the 2016 Regional Water Plan was to be constructed and operated by the City of Corpus Christi, not PCCA.

Significantly, the Regional Water Plan also addresses the environmental analysis required if the seawater desalination strategy is pursued:

> The potential environmental effects resulting from the construction of a desalination plant in the vicinity of Nueces Bay and/or Corpus Christi Bay

[1] Coastal Bend Regional Water Plan, December 2015, at p. 5-46.
[2] Coastal Bend Regional Water Plan, December 2015, at p. 5-50.
[3] Coastal Bend Regional Water Plan, December 2015, at p. 5-51.

> will be sensitive to the siting of the plant and its appurtenances. Environmental analyses including impingement and entrainment will need to be considered as part of the intake evaluation.[4]

PCCA has not considered both impingement and entrainment in its proposed intakes for the project. In fact, PCCA has contended that entrainment reduction or protection will not be required. The environmental analysis of the intakes that the Regional Water Plan set forth as necessary has not been performed. The impingement and entrainment impacts of the proposed facility are discussed in further detail below.

For these reasons, the proposed facility is not consistent with the approved regional water plan for the area where the appropriation is proposed to be located.

V. The Proposed Withdrawal is Detrimental to the Public Welfare.

PCCA's intended withdrawal, and the desalination facility it enables, will result in serious and lasting damage to the nearby environment and the community. In addition to the environmental impacts of the intake structures at the facility, the desalination process will significantly contaminate the nearby waters. Reject water will contain large concentrations of brine that will kill and injure nearby aquatic life. Also, the discharged wastewater will potentially contain chemicals associated with the reverse osmosis process, including scale inhibitors, acids, coagulants, ferric chloride, flocculents, cationic polymer, chlorines, bisufites 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.

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.[5] Spoil Island also has the potential to be a feeding and resting place for migrating birds, including the federally endangered

[4] Regional Water Plan, p. D.9-8.

[5] Harte Research Institute for Gulf of Mexico Studies, Texas A&M University – Corpus Christi, "TM 2.1 – Identification and Characterization of Potential Impacts [and] Mitigation Measures Related to Intake Discharge Facilities of Seawater Desalination Plants", 2015, pp. 5-6.

Piping Plover.[6] Placement of the intake structure in this area will be detrimental to public welfare due to the harm inflicted upon these species.

The proposed desalination project will demand tremendous amounts of electricity from an already fragile electrical grid. Large amounts of energy are required for the withdrawal with high pressure pumps, transport of the water, and waste disposal systems associated with the proposed facility. The installation of critical infrastructure with such an extreme energy need places the reliability of electricity for other uses in the area at risk.

The detriment of the facility to public welfare is only heightened by the cumulative impact of multiple unnecessary proposed desalination facilities within Corpus Christi Bay. The needs of the community should be carefully considered, with permits only issues for those facilities necessary which will be located, designed and constructed in a manner that would minimize adverse environmental impacts. PCCA's La Quinta facility fails to meet these criteria, and is thus detrimental to the public welfare, and should be denied.

The proposed facility will also have a detrimental impact upon public welfare as a result of the adverse impact of the facility upon recreational uses of the receiving waters. As noted above, multiple persons engage in recreational activities in the vicinity where the intake structures are proposed to be located. Due to the location and shallow depth of these intake structures, those structures will create significant currents that will inhibit the use of these waters for swimming. The speed of the current will be accelerated should the screens become partially clogged, thereby creating currents of a strength that would be dangerous to persons within the vicinity of the intake structures. These impacts could be avoided by simply moving the facility and associated intake structure to an offshore location. TCEQ should not authorize such an avoidable threat to public safety.

VI. The proposed withdrawal fails to maintain existing uses of the area near the intake, and fails to maintain the ecology and productivity of Corpus Christi Bay near La Quinta Channel.

The location of the proposed withdrawal within an estuary triggers the consideration of specific additional criteria under the TCEQ rules. Pursuant to 30 TAC § 297.55(b), the Commission is to consider the ecology and productivity of the affected bay and estuary system in determining whether to issue a water right. Relatedly, each water rights permit is required to include conditions considered necessary to maintain existing instream uses and water quality of the stream.[7] As discussed above, 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

[6] *Id.*

[7] 30 TAC § 297.41(a)(3)(D), Tex. Water Code 11.147(d).

characterized as used for exceptional aquatic life uses.[8] Issuance of 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. The impingement and entrainment impacts of the intake endanger the ecology and productivity of the source waters, and would prevent maintenance of existing uses of the source waters.

The governing statutes for the permitting of desalination projects provide that, "[TCEQ] *by rule* shall prescribe reasonable measures to minimize impingement and entrainment." (emphasis added).[9] TCEQ has failed to fulfill this statutory requirement because TCEQ has failed to adopt rules prescribing reasonable measures to minimize impingement and entrainment. It is a violation of statute for TCEQ to process the application without such rules in place to minimize impingement and entrainment.

Under the applicable statute and rules, PCCA is required to demonstrate that the facility will employ reasonable measures to minimize impingement and entrainment. As has been noted by the Texas Parks and Wildlife Department and General Land Office, "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."[10] Any deviation from that method of water withdrawal to employ an alternate method that would increase the potential impingement or entrainment of wildlife must be justified as necessary.

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. The intake structures will be utilized for the intake of industrial cooling water, and are thus subject to the requirements of federal regulations implementing CWA § 316(b). Pursuant to those regulations, impingement and entrainment must be minimized when an intake structure is proposed to be located when there are sport or commercial species of impingement and entrainment concern within the area of the proposed intake.[11] Under such circumstances, reducing the through-screen intake velocity to 0.5 fps is not adequate, particularly when the area will include species members that are planktonic or in larval stages that are not capable of escaping the current induced by the intake structures, and will thus suffer mortality as a result of impingement or entrainment. PCCA's analysis fails to recognize the importance of this context.

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[8] 30 TAC § 307.10(1), Appendix A.
[9] Tex. Water Code § 18.003(h).
[10] Tex. Parks and Wildlife Department & Tex. General Land Office, "Marine Seawater Desalination Diversion and Discharge Zones Study" Report to the 84th Texas Legislature, September 1, 2018, p. 3.
[11] 40 C.F.R. §§ 125.84(b)(4)(2), (b)(5)(2).

Applicant has not even provided the information necessary to evaluate the impact that the impingement and entrainment resulting from the facility will have upon the surrounding environment. As a cooling water intake structure, the determination of the design of this structure involves the consideration of detailed information regarding the assemblage of species currently present in the vicinity of the proposed intake structure, the nature of the habitat present in the vicinity of the proposed intake structure, the physical characteristics of the source waterbody, and the detailed characteristics of the intake structure. PCCA has not provided sufficient information on any of these factors.

The technology proposed for use at the intake structure has not been demonstrated to be best technology available to minimize adverse environmental impacts, as required. PCCA intends to use wedgewire screens at the intake structures. These 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. The proper technologies to minimize entrainment and impingement impacts would be subsurface directional drilled intakes or subsurface infiltration gallery intakes. Only use of these technologies would minimize the impingement and entrainment of important commercial and sport species.

VII. Conclusion

For these reasons, IOBCWA requests that PCCA's application for Water Rights Permit No. 13630 be denied. If the Executive Director maintains his recommendation that Water Rights Permit No. 13630 be granted, then IOBCWA requests a contested case hearing with regard to PCCA's application for Water Rights Permit No. 13630.

Respectfully submitted,
/s/ Eric Allmon
Eric Allmon
State Bar No. 24031819
eallmon@txenvirolaw.com
PERALES, ALLMON & ICE, P.C.
1206 San Antonio Street
Austin, Texas 78701
512-469-6000 (t)
512-482-9346 (f)

COUNSEL FOR INGLESIDE ON THE BAY COASTAL WATCH ASSOCIATION

Melissa Schmidt

From: PUBCOMMENT-OCC
Sent: Wednesday, July 14, 2021 8:33 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: at "Public Meeting on Port of Corpus Christi Authority of Nueces County; Application No. 13630 "

H

-----Original Message-----
From: Brad Patterson <Brad.Patterson@tceq.texas.gov>
Sent: Tuesday, July 13, 2021 9:19 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: FW: at "Public Meeting on Port of Corpus Christi Authority of Nueces County; Application No. 13630 "

-----Original Message-----
From: Isabel Araiza <isabel.araiza.ortiz@gmail.com>
Sent: Tuesday, July 13, 2021 9:18 PM
To: Brad Patterson <Brad.Patterson@tceq.texas.gov>
Subject: at "Public Meeting on Port of Corpus Christi Authority of Nueces County; Application No. 13630 "

Hello,
My name is Isabel Araiza. I spoke earlier on this application number 13630. I like at 326 Poenisch in Corpus Christi Tx. I am requesting a contested hearing.

Thank you,
Isabel

Sent from my iPhone

Melissa Schmidt

From: PUBCOMMENT-OCC
Sent: Wednesday, July 14, 2021 8:44 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: "Public Meeting on Port of Corpus Christi Authority of Nueces County; Application No. 13630 "

From: Brad Patterson <Brad.Patterson@tceq.texas.gov>
Sent: Tuesday, July 13, 2021 8:28 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: FW: "Public Meeting on Port of Corpus Christi Authority of Nueces County; Application No. 13630 "

From: Isabel Araiza <isabel.araiza.ortiz@gmail.com>
Sent: Tuesday, July 13, 2021 7:57 PM
To: Brad Patterson <Brad.Patterson@tceq.texas.gov>
Subject: "Public Meeting on Port of Corpus Christi Authority of Nueces County; Application No. 13630 "

These are my comments that I want to be a part of the record. I intend to speak and have registered for this permit hearing:
My name is Isabel Araiza, I am a founding member of the informal group--For the Greater Good. The city of Corpus Christi began pursuing desal for heavy industrial use. When residents began raising concerns about desal, the city council disregarded our concerns. What's more any discussion did not take into consideration the unknown impacts and the costs seriously. In response to the city of Corpus Christi's blatant disregard of local residents' concerns about the impact of desalination on our local ecosystem, the community, and businesses, members of for the greater good circulating a petition to compel the city to engage with the community about the impact of desalination on our community. We began our petition right before COVID caused all public events and meetings to be cancelled. Even in that context, without any public events, we were able to collect more than 4000 signatures from concerned voters. People are incredibley concerned about the impact of desal and we believe the port is pursuing this bc they know the community would NOT support heavy industry sucking 90 million gallons of water a day from our bay. What's worse is the port is not accountable to any of the local communities. There is no accountability regarding the increase costs and impact desal and the accompanying pollution will have on the local people, economies, and environment. The port should not be allowed to have this permit. The Port is not accountable to the local communities. As stated in the presentation at the beginning of this meeting, desalination is for the Ports Customers and their interests—many of their customers' CEOs, boards, and shareholders are not residents of our community and thus will not be impacted by the pillaging of our natural resources.

Melissa Schmidt

From: PUBCOMMENT-OCC
Sent: Wednesday, July 14, 2021 8:29 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: "Public Meeting on Port of Corpus Christi Authority of Nueces County; Application No. 13630 "

From: Brad Patterson <Brad.Patterson@tceq.texas.gov>
Sent: Tuesday, July 13, 2021 10:34 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: FW: "Public Meeting on Port of Corpus Christi Authority of Nueces County; Application No. 13630 "

From: Isabel Araiza <isabel.araiza.ortiz@gmail.com>
Sent: Tuesday, July 13, 2021 7:57 PM
To: Brad Patterson <Brad.Patterson@tceq.texas.gov>
Subject: "Public Meeting on Port of Corpus Christi Authority of Nueces County; Application No. 13630 "

These are my comments that I want to be a part of the record. I intend to speak and have registered for this permit hearing:
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Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 29, 2021 2:26 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630
Attachments: CCA Comments on WRPERM 13630-signed.pdf

H

From: sbonnot@ccatexas.org <sbonnot@ccatexas.org>
Sent: Sunday, March 28, 2021 1:42 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Shane Bonnot

E-MAIL: sbonnot@ccatexas.org

COMPANY: Coastal Conservation Association - Texas Chapter

ADDRESS: 6919 PORTWEST DR STE 100
HOUSTON TX 77024-8049

PHONE: 2819536612

FAX:

COMMENTS: Please see attached file for comments from CCA Texas.

Re: Notice of Application for Water Use Permit – Permit No. 13630

Dear Sir or Madam,

The Coastal Conservation Association - Texas ("CCA") is a non-profit organization of nearly 70,000 recreational anglers and outdoor enthusiasts. The purpose of CCA is to advise and educate the public on conservation of marine resources. The objective of CCA is to conserve, promote and enhance the present and future availability of those coastal resources for the benefit and enjoyment of the general public.

The Port of Corpus Christi Authority (PCCA) plans to divert 101,334 acre feet of water per year for industrial use in San Patricio County, more specifically, to operate a desalination plant. The application includes very little about the technical review done for protection of environmental flows or the ecology of the bay. The applicant should demonstrate that the diversion of water will not adversely impact environmental flows, ambient bay salinity and aquatic species through impingement or entrapment. To put it plainly, the application is severely lacking in detail and TCEQ should require that the applicant conduct further environmental analysis before consideration.

More specifically, the applicant should demonstrate or incorporate the following:

1. Ratio of the types of salts returned to the bay compared to those in the receiving water;
2. Whether there is adequate circulation to prevent salt from building up over time to a point where it is toxic to the ecological community;
3. Potential for depressed oxygen levels due to poor dispersion;
4. Contaminants discharged with brine resulting from: natural sources of fluoride and copper, operation and maintenance such as conditioning reagents, antiscalant chemicals, and metals from corrosion of piping;
5. A site-specific analysis is recommended to determine if there is toxicity and, if so, the steps needed to minimize the impact;
6. A site-specific study of conditions at proposed intake locations should be conducted to identify marine organisms at risk from intake operations, and to inform the design planning process;
7. Intake structures should be designed to reduce the flow velocity so that marine organisms may escape being drawn into the intake;
8. Intake structure design should adjust to adaptively manage with varying flows and water quality that may occur at the intake site;
9. When feasible, directional drilling to install piping below the seabed and drawing water down through a sandy bottom will prevent impingement of organisms on intake screens exposed to open water, and entrapment of other organisms carried with the feedwater through the intake screen.

Recently, the State Office of Administration Hearings Administrative Law Judges recommended the Texas Commission on Environmental Quality deny a discharge permit application by the PCCA, citing their decision stems from the potential impact the plant's discharge of brine into the bay system. Similar concerns are addressed for this location and the applicant needs to address those concerns prior to

TCEQ giving further consideration to this water rights permit as there will be similar concerns for the discharge permit associated with this operation.

CCA recommends that the TCEQ conduct a public hearing where the agency and the applicant can address these concerns.

Sincerely,

Shane Bonnot

Shane Bonnot

CCA Texas Advocacy Director

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 23, 2021 3:28 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: payton_campbell21@yahoo.com <payton_campbell21@yahoo.com>
Sent: Monday, March 22, 2021 3:55 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Payton Gray Campbell

E-MAIL: payton_campbell21@yahoo.com

COMPANY:

ADDRESS: 6214 LONDONDERRY DR
CORPUS CHRISTI TX 78415-3925

PHONE: 3615634115

FAX:

COMMENTS: I am a resident of Corpus Christi who enjoys our local environment. I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel. I request a two-week extension of the deadline for comments on account of the recent freeze and loss of electricity in Texas. I request that a public

meeting be held for the community to express its concerns. I request that a Contested Case Hearing be held. I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish - or for people! If the fish die, then the birds we love to watch will also die or leave the area.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 29, 2021 2:32 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: Kellennery@hotmail.com <Kellennery@hotmail.com>
Sent: Sunday, March 28, 2021 11:12 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Kellen Chiddix

E-MAIL: Kellennery@hotmail.com

COMPANY:

ADDRESS: 96 BAYSHORE DR
INGLESIDE TX 78362-4824

PHONE: 7192875529

FAX:

COMMENTS: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel I request a two-week extension of the deadline for comments on account of the recent freeze and loss of

electricity in Texas. I request that a public meeting be held for the community to express its concerns. I request that a Contested Case Hearing be held

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 29, 2021 2:18 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: clark7as@aol.com <clark7as@aol.com>
Sent: Sunday, March 28, 2021 3:18 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Adrian Clark

E-MAIL: clark7as@aol.com

COMPANY:

ADDRESS: 935 WATERVIEW ST
PORTLAND TX 78374-2222

PHONE: 3616438736

FAX:

COMMENTS: I am a Portland resident and live approximately 3 miles away from the proposed desalination plant. I am a member of Portland Citizens United and CAPE. I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel I request a two-week extension of the deadline for comments on account

of the recent freeze and loss of electricity in Texas. I request that a public meeting be held for the community to express its concerns. I request that a Contested Case Hearing be held. According to the permit, the Port of Corpus Christi would be allowed to intake 62,890 gallons of water from La Quinta Channel every minute. Intaking that amount of water that fast will require an enormous amount of suction power and I am concerned about aquatic life being trapped or killed in the process. This intake pipe is a death sentence! I and my family members love to hike, run, go birdwatching. along the Portland Shoreline where the intake pipe for the Port of Corpus Christi's desalination facility will be located or in Ingleside Cove where the discharge will flow to. I am concerned that given the number of small larvae which will be sucked up, turned to sludge, and deposited into landfills, fishing will be badly impaired in the region. I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish – or for people! If the fish die, then the birds we love to watch will also die or leave the area. I am concerned about possible health effects on me or my family from the chemicals used in the desalination process, including pre-treatment. I fish for business and I am concerned about loss of income that will happen when aquatic life in La Quinta Channel and Corpus Christi Bay is harmed/destroyed by this desal plant. Many of us suffered through the historic winter storm in February 2021 and were without power for several days in freezing temperatures due to the amount of demand placed on the electrical grid in Texas. The operating pumps required to suck 62,890 gallons of water per minute will take an enormous amount of power, placing even more strain on the grid. I am opposed to issuing a permit which would demand excessive amounts of energy to supply water only for industrial use. Most of the desalinated water will be used by industry for cooling purposes. Aren't there federal regulations that apply to industrial cooling water intake structures? Since Corpus Christi Bay connects to the Gulf of Mexico, doesn't diverting water from Corpus Christi Bay to support private industry without federal oversight amount to stealing from the Waters of the United States (WOTUS)? Since Texas is already drought-prone and gets very hot, why is the Port of Corpus Christi enticing such thirsty high-energy-requiring industries to come here in the first place? Shouldn't they go where it's cooler and where there's more water? Since this desal plant has been listed as a "recommended water strategy" on the Region N Water Plan for 2021, I expect that the Port of Corpus Christi will try to get a low-interest loan from the Texas Water Development Board (TWDB) to construct the plant. Isn't it a violation of Texas law to use public funds to support private industry? Who will have to pay back such a loan? All of our area scientists, including from Texas Parks & Wildlife, the General Land Office, the UT Marine Science Institute, and the Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. There's even an expedited permitting process for this. Why is the Port of Corpus Christi, a public entity, insisting on putting intake and discharge inside Corpus Christi Bay in the first place. Aren't they listening? Why aren't they showing the way by pursuing the expedited permit process that will keep our Bay safer? Why is the Port applying for this permit? Shouldn't it be the private industries that plan to use the desalinated water? Why aren't industries paying to construct this plant? Why aren't industries paying for pipelines to bring in water from offshore and pump the brine back offshore? After all, they pay for other pipelines that cross San Patricio County, tearing up communities and farm land. This permit should be rejected completely out of hand. it is bad for the environment, bad for marine life and will adversely impact public health when fossil fuel based industries move into the area to take advantage of this water supply.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Thursday, March 25, 2021 10:55 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: pattcoeck@aol.com <pattcoeck@aol.com>
Sent: Thursday, March 25, 2021 10:53 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Patt & Yves Coeckelenbergh

E-MAIL: pattcoeck@aol.com

COMPANY:

ADDRESS: 410 MERCER ST
PORT ARANSAS TX 78373-5160

PHONE: 3612443866

FAX:

COMMENTS: To whom it may concern, We live approximately 20 miles from the specific proposed desalination location. We enjoy recreational boating, fishing and swimming in the Coastal Bend waters. We are both members of PAC and CAPE. We are both concerned citizens and want to leave what we have enjoyed to future generations. We STRONGLY

oppose the Port of Corpus Christi's placement of an intake pipe for a desalination plant in the La Quinta Channel. We are requesting a public meeting and a Contested Case Hearing so the community can voice their concerns. Our family recreates in the waters of the Coastal Bend. We enjoy fishing, boating and swimming. The Port says they know what is best for our communities but we STRONGLY disagree An intake of 62,890 gals/min is enormous. What amount of power is needed to operate those pumps? On a grid that collapsed recently during a winter storm that left many without power. The amount of salty brine mixed with other waste water cannot be healthy for aquatic life and other species. The affect on humans who recreate cannot be healthy either. Why is the POCC enticing thirsty, high-energy required industries to the Coastal Bend anyway? They should be promoting and working towards a greener future not towards a dystopia for the whole Coastal Bend. Why is POCC seeking a permit that they will then turn over to a unknown entity? This is plain and simply WRONG. Lastly, all of the areas scientists (TPWL, GLO, UTMSI, HRI) have stated in published reports the the saltwater desalination intake AND discharge should only occur in designated areas offshore in the gulf. Thank you for you time and your considerations. Best wishes, Patt & Yves Coeckelenbergh

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 23, 2021 3:44 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: tdaley@bizstx.rr.com <tdaley@bizstx.rr.com>
Sent: Tuesday, March 23, 2021 1:06 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Tom Daley

E-MAIL: tdaley@bizstx.rr.com

COMPANY:

ADDRESS: 904 SANDPIPER
INGLESIDE TX 78362-4840

PHONE: 3615374244

FAX:

COMMENTS: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake and discharge in the La Quinta channel.I live on the channel and use it for many types of recreation. This would DISTORY this area and ultimately I believe destroy

the bay eco system . I request a two week extension of the deadline for comments because of the resent freeze. I also request that a public meeting be held to rexpress concerns. And also I request that a contested case hearing be held .

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 30, 2021 9:34 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

H

From: 100kyote@gmail.com <100kyote@gmail.com>
Sent: Monday, March 29, 2021 8:50 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Larry R Ferrell

E-MAIL: 100kyote@gmail.com

COMPANY:

ADDRESS: 132 SUNSET
INGLESIDE TX 78362-4739

PHONE: 3617795051

FAX:

COMMENTS: I oppose PCCA's placement of the intake for the desalination plant in La Quinta Channel. I request a two week extension of the comment period,and a public hearing be held for our community to express our concerns. I live less than a mile from La Quinta Channel and am very concerned about the aquatic life. The active force of the

desalination plant and the brine discharge will certainly have a detrimental effect on our environment. I am a member of the Ingleside on the Bay Coastal Watch Association.

Melissa Schmidt

From: PUBCOMMENT-OCC
Sent: Wednesday, July 14, 2021 8:36 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: WRPERM 13630

From: Brad Patterson <Brad.Patterson@tceq.texas.gov>
Sent: Tuesday, July 13, 2021 9:00 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: FW: WRPERM 13630

From: Debby Ferrell <debo.ferrell@gmail.com>
Sent: Tuesday, July 13, 2021 8:58 PM
To: Brad Patterson <Brad.Patterson@tceq.texas.gov>
Subject: WRPERM 13630

My husband and myself have been listening to tonight's "Public Meeting". I feel we need to state the applicant, the Port of Corpus Christi, has been less than truthful regarding the full impact to ALL the aquatic life in the bay system. The long term effects to our beautiful bay can only be devastating. Please, please reject this water permit.

Debby and Larry Ferrell
132 Sunset
Ingleside on the Bay, TX 78362

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Thursday, March 25, 2021 9:27 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: ggreen702@gmail.com <ggreen702@gmail.com>
Sent: Thursday, March 25, 2021 9:03 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Frank Glenn Green

E-MAIL: ggreen702@gmail.com

COMPANY:

ADDRESS: 4657 OCEAN DR
CORPUS CHRISTI TX 78412-2660

PHONE: 7022391398

FAX:

COMMENTS: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel and request a two-week extension of the deadline for comments on account of the recent freeze and loss of electricity in Texas. I also request that a public meeting be held for the community to express its concerns as well as I

request that a Contested Case Hearing be held. I and my family members love to kiteboard/fish/boat/swim/etc. along the Portland Shoreline where the intake pipe for the Port of Corpus Christi's desalination facility will be located or in Ingleside Cove where the discharge will flow to. I am concerned that given the number of small larvae which will be sucked up, turned to sludge, and deposited into landfills, fishing will be badly impaired in the region.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 23, 2021 3:45 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: skiph@cableone.net <skiph@cableone.net>
Sent: Tuesday, March 23, 2021 1:32 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Catherine Hatch

E-MAIL: skiph@cableone.net

COMPANY:

ADDRESS: 418 WOODHAVEN
INGLESIDE TX 78362-4699

PHONE: 3617762071

FAX:

COMMENTS: My husband and I have lived and fished here on Ingleside on the Bay for nearly 40 years, feet away from La Quinta Channel. We are members of Ingleside on the Bay Coastal Watch Association. I strongly oppose the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel. I am also requesting a two week

extension of the comment deadline because of the recent loss of electricity in this area thereby delaying the disbursement of information to our neighbors. I am also requesting a public meeting as well as a Contested Case Hearing be held so that my neighbors can express their concerns. This whole idea of placing an intake pipe in our waters is troubling because the numbers of larvae which will be sucked up and deposited into landfills and causing fishing to be negatively affected. This, along with the amount of salty brine that will be discharged form the desal plant. This will be so detrimental to the entire ecosystem of this area, impacting our shrimping industry as well as the fishing guides and myself as a fisherperson. I am an avid birdwatcher and it will break my heart to see the demise of these beautiful birds because of this monstrous plan. I also feel compelled to remind you that area scientists from Texas Parks and Wildlife, the General Land Office, the UT Marine Science Institute and the Harte Research Institute have said that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. Why aren't industries paying for pipelines to be constructed as they do for all the oil and gas pipelines that cross my county.

Melissa Schmidt

From: PUBCOMMENT-OCC
Sent: Wednesday, July 14, 2021 8:34 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

H

From: dhenderson.tcrw@protonmail.com <dhenderson.tcrw@protonmail.com>
Sent: Tuesday, July 13, 2021 9:04 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER: 2021-0421-WR

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: MRS Deena Henderson

E-MAIL: dhenderson.tcrw@protonmail.com

COMPANY:

ADDRESS: 2323 WILLOW DR
PORTLAND TX 78374-3220

PHONE: 3612294726

FAX:

COMMENTS: I am a resident of Portland. I am a constitutionalist, who believes in balancing, jobs, industry, quality of life and nature. As stewards of this Texas land. we need to prioritize what is most important. Water is a basic human need, the most basic. Also, I know people who fish to supplement their meals, because hey do not have a living wage. You are taking food from their family table. I have lived through 4 draughts since moving to Portland. Should we jeopardize

having a population living in this area for the greed and power hungry "people" in control of Corpus Christi and the Port Authority? Studies show, when you alter an ecosystem, you will have dire results. Please, consider the future our our area, not just the profit. The Great Salt Lake is a barren area!!! We are sacrificing livelihoods of shrimpers, fisherman, recreational small businesses. Not to mention all the peripheral businesses along the coast. Our energy grid is already compromised. Many of us sat frozen in February. Why are we going to allow such a huge energy user to enter our grid? All decisions should be for the best of Texas residents. This plant and intake will be detrimental to all who live in this area. I work at the high school, boys were in activities, I am involved in the counties largest church. I know one local resident that was hired by the La Quinta plant. One. I have met a dozen that MOVED here to work at the plant. Please grant a contested case hearing. If this had been better publicized you would have 8000 commenters. Brownsville desal project illustrates the damage done to a bay. May the Lord bless you and guide you in this, and all decisions.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 8, 2021 11:37 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: Brucemundycos@yahoo.COM <Brucemundycos@yahoo.COM>
Sent: Thursday, March 4, 2021 8:11 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: BRUCE H HENKHAUS

E-MAIL: Brucemundycos@yahoo.COM

COMPANY: INGLESIDE ON THE BAY COASTAL WATCH ASSOCIATION

ADDRESS: 734 SANDPIPER
INGLESIDE TX 78362-4798

PHONE: 5402396410

FAX:

COMMENTS: DEAR TCEQ, My name is Bruce Hekhaus. I live at Ingleside on the Bay- one block off the the beach of Corpus Christi Bay. I live less than 1/4 mile from the LaQuinta Channel. I have been here for 10 years. My wife and I were so happy to find this little paradise 10 years ago when we moved here. I have been a life long Texan. I didn't know that

an unspoiled little place like this still existed. Please save it. it is worth it in the long run. I grew up on Galveston Bay, and Fished for may years in Baffin Bay, Matagorda Bay, and other bay systems in Texas. I had never seen such a beautiful variety of marine life in any other bay system- beautiful clear water- acres of rare sea grass-turtle grass, manatee grass, and widgen grass. Even when the mighty southeast winds blew, the water stayed clear with the silt and mud below locked firmly into place. The bottom was alive with wonderful native sea creatures-sponges, corals, sea horses, starfish, crabs, lightning whelks, oysters, blue crabs, stone crabs, fiddler crabs, hermit crabs, shrimp, and many other benthic organisms. I had never seen such a bounty of beautiful creatures hiding in the grass as they had for many thousands of years. Pin Perch, Piggy Perch, Mangrove Snappers, Stingrays, Cownose Rays, Sharks, Trout, Redfish, Flounder, Black Drum, Sheepshead, and so so many varieties of delicate minnows-all valuable and contributing to the Eco System. Sea Turtles grazing in the grass. Large Pods of curious and intelligent Dolphins feeding, playing, raising their babies. That is the way it was- Sadly it has been declining due to rapid industrialization, I urge you to save what is left of this precious vanishing resource. I urge you to deny a permit to dump toxic levels of salt into our bay and estuary. This should remain a paradise and a refuge for beautiful creatures that live here. Not a dumping ground for the Port of Corpus Christi, Industry, and Billionaires. The bays belong to all of us and to the creatures that live in and around it. They depend on it for their survival. Please do not destroy it with more salt just to satisfy the greed of the Port. And Furthermore: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel I request a two-week extension of the deadline for comments on account of the recent freeze and loss of electricity in Texas. I request that a public meeting be held for the community to express its concerns. I request that a Contested Case Hearing be held. These are the FACTS and the reasons that I oppose installing a desalination plant on LaQuinta Channel. According to the permit, the Port of Corpus Christi would be allowed to suck 62,890 gallons of water from La Quinta Channel every minute. Sucking in that amount of water that fast will require an enormous amount of suction power and I am concerned about aquatic life being trapped or killed in the process. This intake pipe is a death sentence! I and my family members (describe their relationship, such as grandchildren) love to fish/boat/swim/etc. along the Portland Shoreline where the intake pipe for the Port of Corpus Christi's desalination facility will be located or in Ingleside Cove where the discharge will flow to. I am concerned that given the number of small larvae which will be sucked up, turned to sludge, and deposited into landfills, fishing will be badly impaired in the region. I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish - or for people! If the fish die, then the birds we love to watch will also die or leave the area. I am concerned about possible health effects on me or my family from the chemicals used in the desalination process, including pre-treatment. Many of us suffered through the historic winter storm in February 2021 and were without power for several days in freezing temperatures due to the amount of demand placed on the electrical grid in Texas. The operating pumps required to suck 62,890 gallons of water per minute will take an enormous amount of power, placing even more strain on the grid. I am opposed to issuing a permit which would demand excessive amounts of energy to supply water only for industrial use. Most of the desalinated water will be used by industry for cooling purposes. Aren't there federal regulations that apply to industrial cooling water intake structures? Since Corpus Christi Bay connects to the Gulf of Mexico, doesn't diverting water from Corpus Christi Bay to support private industry without federal oversight amount to stealing from the Waters of the United States (WOTUS)? Since Texas is already drought-prone and gets very hot, why is the Port of Corpus Christi enticing such thirst high-energy-requiring industries to come here in the first place? Shouldn't they go where it's cooler and where there's more water? Since this desal plant has been listed as a "recommended water strategy" on the Region N Water Plan for 2021, I expect that the Port of Corpus Christi will try to get a low-interest loan from the Texas Water Development Board (TWDB) to construct the plant. Isn't it a violation of Texas law to use public funds to support private industry? Who will have to pay back such a loan? All of our area scientists, including from Texas Parks & Wildlife, the General Land Office, the UT Marine Science Institute, and the Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. There's even an expedited permitting process for this. Why is the Port of Corpus Christi, a public entity, insisting on putting intake and discharge inside Corpus Christi Bay in the first place. Aren't they listening? Why aren't they showing the way by pursuing the expedited permit process that will keep our Bay safer? Why is the Port applying for this permit? Shouldn't it be the private industries that plan to use the desalinated water? Why aren't industries paying to construct this plant? Why aren't industries paying for pipelines to bring in water from offshore and pump the brine back offshore? After all, they pay for other pipelines that cross San Patricio County, tearing up communities and farm land. Please do your job. Protect our environment. Not Billionaire

Profiteers. Thank you, Bruce Henkhaus 734 Sandpiper Ingleside on the Bay, Texas 78362 540-239-6410 BRUCEMUNDYCOS@YAHOO.COM

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Friday, March 26, 2021 2:41 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: I oppose WRPERM 13630

PM

From: CHIEFCLK <chiefclk@tceq.texas.gov>
Sent: Friday, March 26, 2021 9:53 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: FW: I oppose WRPERM 13630

From: Bruce Henkhaus <Bruce.Henkhaus.359822047@p2a.co>
Sent: Thursday, March 25, 2021 1:59 PM
To: CHIEFCLK <chiefclk@tceq.texas.gov>
Subject: I oppose WRPERM 13630

Dear Chief Clerk,

I ask that you deny WRPERM 13630, and I oppose the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel. This water will largely be for industrial use, not for me, my family, or my neighbors. I don't think bringing polluting corporations to our community is worth the cost these desalination plants will have on our Bay, on our wildlife, and on our local fishing and tourism economies.

I request a two-week extension of the deadline for comments on account of the recent freeze and loss of electricity in Texas. I also request that a public meeting be held for the community to express its concerns.

Regards,
Bruce Henkhaus
734 N Sandpiper
Ingleside, TX 78362

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 29, 2021 2:27 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: jhilliard@wkmcarchitects.com <jhilliard@wkmcarchitects.com>
Sent: Sunday, March 28, 2021 1:33 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Jennifer R Hilliard

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COMPANY:

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INGLESIDE TX 78362-4840

PHONE: 3612496260

FAX:

COMMENTS: My name is Jennifer Hilliard and I live at 904 N. Sandpiper in the small community of Ingleside on the Bay that sit directly on the La Quinta channel and a couple of miles away from the proposed desalinization plant in permit WRPERM 13630. I also sit on the board of directors of Ingleside on The Bay Coastal Watch Association. I speak for myself

and many members of our community not familiar with the process of protesting the environmental degradation of the place they call home and the natural resources that surround them when I say this permit should NOT be granted and the Port of Corpus Christi should not be allowed to place an intake pipe for a desalinization plant in the La Quinta channel. I would also like to request a public meeting so that members of the community can express their concerns and I also request that a contested case hearing be held. Me and my family regularly fish these waters and this intake facility can decimate the fish and shellfish and be detrimental to the future sustainability of aquatic life. There are several experts at the University of Texas Marine Science Institute and Texas A&M University Corpus Christi who have studied these waters and published peer reviewed scientific findings that show this will be bad for our waters and the entire Corpus Christi Bay. An important difference is these findings from University scientists is they are not generated from "paid for research" by the applicant or the industry that will benefit from the permitted use. When the TCEQ looks at true independent research data, the findings are clear that the current design of the intake structure will lead to an almost 100% fatality rate of impinged and entrapped species that will lead to habitat destruction and displacement. The cherry picking of the data resented by the applicant is not a true representation of the information the TCEQ needs to make a multi-million dollar permit that will be paid for by the local tax payers, to benefit industry, that will impact the quality of life for all residents who enjoy the Corpus Christi Bay waters. Texas Parks and Wildlife, the General Land Office and The Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf of Mexico. Please, do not rubber stamp these permits relating to seawater desalination. The impact to our shoreline and way of life should not be destroyed because the applicants and the industry that will benefit from the water do not want to pay for additional pipeline to move this offshore.

Melissa Schmidt

From: PUBCOMMENT-OCC
Sent: Wednesday, July 14, 2021 8:33 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630
Attachments: WRPERM 13630 POCC La Quinta_JH Comments.pdf

H

From: jhilliard@wkmcarchitects.com <jhilliard@wkmcarchitects.com>
Sent: Tuesday, July 13, 2021 9:28 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER: 2021-0421-WR

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Jennifer Hilliard

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FAX:

COMMENTS: PLEASE SEE ATTACHED COMMENTS

My name is Jennifer Hilliard and I live at 904 N. Sandpiper in the small community of Ingleside on the Bay that sits directly on the La Quinta channel and only a couple of miles away from the proposed desalinization plant in permit WRPERM 13630. I also sit on the board of directors of Ingleside on The Bay Coastal Watch Association. I speak for myself and many members of our community not familiar with the process of protesting the environmental degradation of the place they call home. So it with several voices that I say this permit should NOT be granted and the Port of Corpus Christi should not be allowed to place an intake pipe for a desalinization plant in the La Quinta channel. I request that a contested case hearing be held.

My family and I regularly fish these waters and this intake facility has a high probability to be detrimental to marine life and threatens the future sustainability of the aquatic ecosystem. There are several peer reviewed studies by the scientists with the University of Texas Marine Science Institute and Texas A&M University Corpus Christi who have surveyed these waters and published findings that show a desalination plant in the Corpus Christi Bay is a bad idea. Unlike the data provided to the TCEQ by the Port of Corpus Christi which is engineered to provide a way to meet the Ports goal of building a desalination plant in the La Quinta channel. For example, the July 2015 paper published by Greg Stunz and Paul Montagna of the Harte Research Institute for Gulf of Mexico Studies at Texas A&M University regarding potential environmental impacts and mitigation measures of several potential locations for intake and discharge facilities of seawater desalinization plants, listed the La Quinta channel sites as "the most environmentally diverse" and the wedgewire screen intake at the La Quinta Channel Extension as the "least favorable ". In contradiction to what Sarah Garza stated earlier, this report notes the spoil island area near this proposed intake to have seagrass habitats, sensitive for economically important species of red drum, spotted seatrout and flounder. This area is adjacent to sensitive fish 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 water birds. The site adjacency to the Port of Corpus Christi's property and submerged property located along the channel would appear to be the only reason the site has been chosen by the Port with complete disregard for the welfare of the marine habitat. This paper states the preferred intake method either subsurface directional drilled or subsurface infiltration gallery intakes, although limited to intakes of 15 million gallons. So when Sarah Garza stated that the wedge wire is the best technology known at this time, she should have noted that the large amount of water the Port is diverting, forces this project to use a **the** most destructive type of intake structure listed and has been shown to have a 100% fatality rate of impinged and entrapped species. Of note, the Carlesbad California facility is currently in process of changing their intake structure to a subsurface directionally drilled intake. I have included a copy of this report with these remarks.

The Port often cites the number of jobs a project may provide and seldom mentions the number of jobs

the bay system supports a 1,249 jobs and generates $112.7 million in total economic impact. This intake facility could also create a loss in the quality of life for all residents who enjoy the Corpus Christi Bay waters. Texas Parks and Wildlife, the General Land Office and The Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf of Mexico. The Port has stated in a recent publication titled "The 2020 Desal Fact Sheet" about the Harbor Island Desalination Project, that it is committed to exceeding environmental standards by engaging local universities and agencies to provide research and input on projects. With that, I would like to propose that a Scientific Advisory Panel be convened to help develop criteria for modeling, intake structures, monitoring programs and regulating toxicity and water quality. This panel should include organizations that are independent of Industry such as Texas Parks and Wildlife, the University of Texas Marine Science Institute, Harte Research Institute at Texas A&M University - Corpus Christi, Mission Aransas National Estuarine Research Reserve, Coastal Conservation Association, Coastal Bend Bays and Estuaries Program, and the Texas General Land Office. The minimum requirements by agencies or statutes currently being used for this permit were not developed for seawater desalination process and they lack the requirements needed to protect the Corpus Christi Bay ecosystem. Before granting a permit with such a large potential to damage our marine ecosystem, the regulations and quality controls regarding seawater desalination should be developed by scientist and conservationist Instead of paying lip service to the organizations, actually allow **them** to guide the permitting process.

Also, I argue that before building desal plants, industries should be mandated to fully implement conservation programs, promote potable re-use (the re-use of wastewater, also known as toilet-to-tap recycling) or treat storm water runoff. It makes sense to do the cheaper options first and leave the more expensive and potentially damaging options for later as the technology and knowledge of the effects become better known. Through conservation a shift should occur away from thinking of water as a cheap asset to a true understanding of the value of clean water and the invaluable treasure of our marine habitats.

Please, do not rubber stamp these permits relating to seawater desalination. The impact to our shoreline and way of life should not be destroyed because the applicants and the industry that will benefit from the water do not want to pay for additional pipeline to move this offshore. These industries pipe for profit products hundreds, no thousands of miles. Yet, when it comes to water, a pipeline of 100 miles is too expensive.

Attachements:

Stunz, Greg and Montagna, Paul. 2015. Identification and Characteristics of Potential Environmental Impacts Mitigation Measures Related to Intake and Discharge Facilities of Desalination Plants. Harte Research Institute for Gulf of Mexico Studies. Texas A&M University-Corpus Christi.

TM 2.1 – Identification and Characterization of Potential Environmental Impacts Mitigation Measures Related to Intake and Discharge Facilities of Seawater Desalination Plants

Variable Salinity Desalination Demonstration Project
City of Corpus Christi

10 July 2015

By Greg Stunz (intakes) and Paul Montagna (discharges)
Harte Research Institute for Gulf of Mexico Studies
Texas A&M University-Corpus Christi

Introduction

A preliminary overview of the potential environmental impacts and mitigation measures of several pre-determined sites as potential locations for intake and discharge facilities of seawater desalinization plants has been conducted. Below is a summary of those results. Also included in these analyses are matrices that further detail how the recommendations were derived, and there are lists of common species that would likely be impacted based on the current literature available. Certainly, as candidate site selection is conducted and refined, detailed assessments of species and habitat impacts as well as thorough site-specific analyses would need to be performed.

Intake Site Assessment

When considering locations for a desalinization intake site, multiple factors have to be examined. From an ecological standpoint, the biggest concerns are related to impacts that the desalination plant would have on the resident fauna. Two factors that have the most impact are impingement and entrainment. Impingement of larger fish, marine mammals, and sea turtles can reduce the spawning stock biomass due to an increased mortality rate. In addition, entrainment of smaller ichthyoplankton and eggs can reduce recruitment. Despite the known ecological impacts that construction of a desalinization plant creates, directed sampling pre- and post-construction would need to be conducted in order to measure the actual environmental impacts to the selected site. While specific detailed mitigation measures are beyond the scope of this report, all sites with the exception of 2A and 2B (the most environmentally diverse locations) would likely have similar mitigation measures.

Specifically for this study, six candidate intake assessment locations were chosen by Freese and Nichols, Inc. The Harte Research Institute, specifically the Fisheries and Ocean Health Lab was contracted to identify potential environmental impacts of specific intake structures

listed for the following locations: two chosen near Broadway WWTP, two near the La Quinta Channel Extension, one offshore in the Gulf of Mexico, and one in the Viola Turning Basin in the Inner Harbor (Figure 1). In the following assessment, the key environmental intake topics of concern will be discussed:

- Impingement of marine life on screens
- Entrainment of marine life in desalinization plant
- Impacts on seagrass and other sensitive marine areas
- Visual impacts and disturbance of coastal uses
- Impacts on coastal wetlands
- Other environmental issues

Overall Recommendations: This section summarizes our opinions on the proposed designs and locations, focusing on those that would minimize the impact to resident fauna and limit degradation or loss of high quality habitat. Under the current proposed plan, the preferred intake type would be either the subsurface directional drilled or subsurface infiltration gallery intakes. Logistical limitations prevent all sites as candidates for these subsurface methods, and our recommendation considers these limitations. While benthic organisms would be impacted during the creation of the subsurface system, once created there would be no freestanding source from which fauna could be impinged or entrained. When taking into account both the sites proposed and the intake types at those locations, a directional drilled intake would be recommended at site 3A as the overall preferred location/intake type. Since the location is outside of Corpus Christi Bay, there would be less impact on ship navigation during construction. This site and intake type combination also would likely have the lowest overall effect on mortality (construction and daily operations). However, we do make alternative recommendations and provide our opinion on the pros and cons of each location. Overall, we recommend the following sites and intake type combinations (in order of preference):

1. Site 3A as a directional drilled intake
2. Site 3A as an infiltration gallery intake
3. Site 1A as a directional drilled intake
4. Site 1A as an infiltration gallery intake
5. Site 3A as a wedgewire intake
6. Site 1A as a wedgewire intake
7. Site 4A as an onshore open intake
8. Site 1B as an onshore open intake
9. Site 2A as an offshore directional drilled intake
10. Site 2A as an offshore infiltration gallery
11. Site 2B as an onshore surface intake

These recommendations are based strictly from an ecological perspective, and in some cases and may not be feasible for the specific plant designs proposed here. Specifically, subsurface intakes are effective if the installation requires less than 15 million-gallon-per-day (mgd) intake capacities (WateReuse Association 2011). For the current intake location assessment, the target capacity is 50 mgd. Given this, while subsurface intakes are ideal regarding their minimal impact to the local biota, they may also be impractical in this specific scenario. If the final design of the plant requires 50 mgd, the following sites and intake type combinations are recommended (in order of preference, omitting subsurface options):

1. Site 3A as a wedgewire intake
2. Site 1A as a wedgewire intake
3. Site 4A as an onshore open intake
4. Site 1B as an onshore open intake
5. Site 2B as an onshore surface intake

Site Specifics Recommendations

The following is a site by site breakdown of the potential environmental impacts due to the construction of a desalinization intake. An intake selection matrix (Table 1) contains site-specific details and other criteria used to determine these recommendations. A list of the marine nekton species in Corpus Christi Bay that could potentially be impacted has also been included (Table 2). Clearly, as facilities siting becomes more refined, detailed assessments would be needed to further elucidate site-specific impacts. These recommendations are presented by site number and not in order of preference.

Site 1: Near Broadway WWTP

Site 1A is located in the Corpus Christi Bay near Inner Harbor with submerged wedgewire, subsurface filtration gallery, or subsurface directional drilled intakes as the proposed types.

- **Impingement of marine life on screens**
  Constructing a submerged wedgewire intake would have a greater potential for impinging marine fauna as compared to a subsurface intake. A subsurface intake (either filtration gallery or directional drilled) would have the least amount of overall mortality since it does not protrude from the seafloor, so there is no concern of impingement for this type of intake.

- **Entrainment of marine life in desalinization plant**
  The wedgewire intake would likely increase marine life mortality on a daily operating basis as opposed to a subsurface intake because there is a greater potential for impinging marine fauna. With a subsurface intake the water is drawn

through the sand/gravel so most of the larvae and eggs in the water column would not filter through the seafloor and are not at risk for entrainment.

- **Impacts on seagrass and other sensitive marine areas**
  This location does not appear to have any type of limiting habitat (i.e., seagrasses) that would negatively impact the resident benthic fauna. If a subsurface intake was constructed it is possible that the motile species would be able to avoid the area during construction and potentially re-settle upon its completion.

- **Visual impacts and disturbance of coastal uses**
  Since it is submerged offshore, either of the intake options (wedgewire or submerged) present no concern regarding visual disturbances and minimal concern regarding navigational disturbances (e.g. shrimp trawls) in this area.

- **Impacts on coastal wetlands**
  There are no concerns about coastal wetlands due to the intake being submerged and offshore based on NWI maps for the surrounding area.

- **Other environmental issues**
  No other environmental issues have currently been identified at this time.

Site 1B is located in the Corpus Christi Bay Turning Basin - proposed to be an onshore surface intake using traveling screens.

- **Impingement of marine life on screens**
  The onshore traveling screen intake would impact the surrounding marine fauna. Depending on construction location and depth, fish and invertebrates are likely to become impinged in the screen and occasional cleaning would be necessary to ensure proper operation. The use of fish buckets would help limit this problem, but there are still problems with macroalgae potentially fouling the screens.

- **Entrainment of marine life in plant**
  Larval fish, eggs, and plankton would be entrained in a traveling screen intake. However, the habitat quality in this area is likely already impacted by industrialization, so it is unlikely that the mortality from entrainment would be enough to substantially impact any local populations.

- **Impacts on seagrass and other sensitive marine areas**

Due to the highly industrialized area it is unlikely to have any type of sensitive habitat types (i.e., seagrasses) to an extent that would negatively impact the resident benthic fauna, so it is possible that the motile species would be able to avoid the area during construction and potentially re-settle upon completion.

- **Visual impacts and disturbance of coastal uses**
  As with all surface intakes, this unit (or building housing the unit) would be visible. Most of the area surrounding the proposed site is heavily industrialized so despite the construction of the new intake, the general aesthetics of the area would not change. One other consideration is the addition of any debris or sedimentation to the barge canal during construction. A portion of the canal might need to be narrowed or closed, which could create problems for ships attempting to unload/load cargo in the surrounding area.

- **Impacts on coastal wetlands**
  While the shoreline would be impacted, there wetlands in the area are approximately 75 m from the so there would a slight potential for impacts on coastal wetlands.

- **Other environmental issues**
  No other environmental issues have currently been identified at this time.

Site 2: La Quinta Channel Extension

Site 2A is located west of Spoil Island with suggested intake types that include submerged infiltration gallery and submerged directional drilled. Follow-up inquires by Freese and Nichols, Inc. included a possible wedgewire screen intake at this site. For the same reasons as described below, this intake type would also be least favorable among the other site locations.

- **Impingement of marine life on screens**
  No concerns due to submerged intakes. For a wedgewire intake there would be a greater potential for impinging marine fauna as compared to a subsurface intake.

- **Entrainment of marine life in plant**
  No concerns due to submerged intakes. The wedgewire intake would have higher marine life mortality on a daily operating basis as opposed to a subsurface intake

- **Impacts on seagrass and other sensitive marine areas**

During construction, the mortality of benthic organisms would be subject to the greatest change in this system because of physical disturbance to the bottom sediments. The Spoil Island area is known to have seagrass habitats, sensitive for economically important species of sciaenids (e.g. red drum, spotted seatrout) and paralichthys (flounders). This area is also adjacent to sensitive fish 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. Thus, these physical and geographical concerns lead to some reservations about these areas as candidate sites.

- **Visual impacts and disturbance of coastal uses**
  Since it is submerged, any of the intake options (infiltration gallery, directional drilled, or wedgewire intake) present no concern regarding visual disturbances and minimal concern regarding navigational disturbances (e.g. shrimp trawls) in this area. However, during construction of the infiltration gallery the shipping channel would be affected, since pipes need to be laid down in order to bring the water from the intake to the plant. A directional drill intake might be a better option since drilling can occur without impact to the shipping channel.

- **Impacts on coastal wetlands**
  While the area is not considered coastal wetlands, there are concerns about negatively impacting the seagrass and Spoil Island habitat if an intake were to be placed in this area.

- **Other environmental issues**
  Spoil Island has the potential to be a feeding and resting place for migrating birds, including the federally endangered Piping Plover (*Charadrius melodus)*. Altering the island or surrounding shoreline area could decrease the suitability for this area to provide necessary resources for migrating birds.

Site 2B is an onshore surface intake located on the shoreline of the channel extension.

- **Impingement of marine life on screens**
  With the close proximity to seagrasses, it is likely that a traveling screen intake would be a source of mortality for recreationally important species such as sciaenids and paralichthys.

- **Entrainment of marine life in plant**

In this location, larval fish, eggs, and plankton would become entrained. This area has the potential to for impacting the recruitment of recreationally important species (e.g. sciaenids and paralichthys) due to the relatively high habitat quality of the surrounding area.

- **Impacts on seagrass and other sensitive marine areas**
  This location is in close proximity to seagrass. Since many species use seagrass beds as recruitment areas, this site would not be recommended for development. Like site 2A, this area is also adjacent to some of the most sensitive fish nursery habitat and other areas that are important for a variety of marine life. Thus, these physical and geographical concerns lead to some reservations about these areas as candidate sites.

- **Visual impacts and disturbance of coastal uses**
  As with all surface intakes, this unit (or building housing the unit) would be visible. A portion of the canal might need to be narrowed or closed, which could create problems for ships attempting to unload/load cargo in the surrounding area.

- **Impacts on coastal wetlands**
  Approximately 60 acres of the entire shoreline at this location is classified as estuarine and marine wetlands according to the NWI map. Creating a surface intake would impact coastal wetlands by the need to create the intake system on the shoreline.

- **Other environmental issues**
  No other environmental issues have currently been identified.

Site 3: Mustang or Padre Islands

Site 3A is proposed to be located 2 miles offshore, with proposed intake types including submerged wedgewire, submerged infiltration gallery, and submerged directional drilled.

- **Impingement of marine life on screens**
  Constructing a submerged wedgewire intake would have greater potential for impinging marine fauna compared to a subsurface intake. Since this location is outside of Corpus Christi Bay, there is a greater variety of species that may become impinged in the intake. Although there would be mortality associated with the construction of a subsurface intake (either filtration gallery or directional drilled) there is no concern about impingement since it does not protrude from the seafloor. It is our opinion that this area would have the least impact based on our

criteria; however, it is also the least studied. If chosen, further detailed assessment would need to be performed at this area.

- **Entrainment of marine life in plant**
  The wedgewire intake would have the greatest potential for marine life mortality on a daily operating basis, compared to a subsurface intake where water that is drawn into the sediment is used. Since the water from a subsurface intake is drawn through the sand/gravel, larvae and eggs in the water column would not filter through the seafloor and would not be at risk for entrainment.

- **Impacts on seagrass and other sensitive marine areas**
  During construction, the benthic organisms would be the most likely effected in this system because of the physical disturbances to the bottom. This location does not appear to have any type of limiting habitat (i.e., seagrasses) that would negatively impact the resident benthic fauna, so it is possible that the motile species would be able to avoid the area during construction and potentially re-settle once construction is complete.

- **Visual impacts and disturbance of coastal uses**
  Since it is submerged offshore, either of the intake options (wedgewire or submerged) present no concern regarding visual disturbances and minimal concern regarding navigational disturbances (e.g. shrimp trawls) in this area.

- **Impacts on coastal wetlands**
  Since this site is outside of Corpus Christi Bay, there are no concerns about negative impacts on coastal wetland.

- **Other environmental issues**
  No other environmental issues have currently been identified.

Site 4: ON Stevens WTP

This site is proposed to be located in the Viola Turning Basin, a heavily industrialized area at the end of the Corpus Christi Turning Basin. The proposed intake at this location is an onshore traveling screen surface.

- **Impingement of marine life on screens**
  This location is at the end of the Viola Turning Basin, which is not a favorable habitat for most species of recreational importance. Impingement would be a concern, but it is likely to be of mostly lower trophic level species (e.g. anchovies,

silversides) which can be found throughout the Corpus Christi Bay system. The potential for macroalgae to become impinged is a concern as well.

- **Entrainment of marine life in plant**
  The abundance of eggs, larval fish, or plankton that get entrained in the surface intake likely would not be as high as the other sites, since the location is so far from any source of inflow. This water may already be slightly more saline than other locations due to evaporation and extended flushing cycles, making it a harsher environment than the other listed sites.

- **Impacts on seagrass and other sensitive marine areas**
  This location does not appear to have any seagrass in the surrounding area.

- **Visual impacts and disturbance of coastal uses**
  As with all surface intakes, this unit (or building housing the unit) would be visible after construction. This channel was created as a shipping lane, so most of the area is already industrialized.

- **Impacts on coastal wetlands**
  Depending on location, there are approximately 30 acres of freshwater emergent wetlands that might be impacted during the creation of the surface intake.

- **Other environmental issues**
  No other environmental issues have currently been identified.

Discharge Facilities Assessment

When considering the locations for desalination plant discharge facilities, several factors need to be considered. The addition of brine concentrate can have environmental impacts on the marine community. As a result, the salinity tolerance of marine organisms need to be considered when determining the locations for Corpus Christi desalination plant discharge locations (Figure 2). Changes in salinity and temperature can have deleterious effects on many marine species, particularly those in early developmental stages. See Table 3 for a list of the marine species of bottom dwellers in Corpus Christi Bay that could potentially be impacted. Specifically for this study, five candidate discharge assessment locations were chosen by Freese and Nichols, Inc.

The Harte Research Institute, more specifically the Ecosystem Studies and Modeling Lab was contracted to identify potential environmental impacts of specific discharge structures to the surrounding environment.

Biomass, abundance, and diversity of the benthic community can be affected by salinity changes (Montagna et al. 2002, Van Diggelen 2014). The average salinity in the Corpus Christi Bay system since 1987 is about 35 ± 7 ppt. The estuarine macrobenthic community of Corpus Christi Bay would not likely be affected by a salinity increase within this range (Table 4, Montagna et al. 2013). However, brine plumes can create hypoxic or anoxic zones which disturb benthic communities and organisms in the water column. It is known that there is an interaction between salinity and dissolved oxygen (DO) concentration in Corpus Christi Bay, such that benthic communities decline dramatically as salinity increases to around 42 ppt and DO decreases to around 3 mg/L (Ritter and Montagna 1999). This effect could be heightened due to depressions in the bay bottom that are scattered throughout Corpus Christi Bay, which constrain mixing of bottom water, leading to hypoxia (Nelson 2012). In contrast the average DO in Corpus Christi Bay is 6.3 mg/L. Directed sampling before and after the construction of a discharge facility would be recommended in order to determine the actual environmental impacts to the selected sites.

Some of the proposed discharge sites are recorded as having evidence of contaminant-induced degradation of sediment quality from storm-water outfalls. Sampling would need to be conducted post-construction to monitor if there is any change in contaminant-induced degradation of sediment quality (Carr et al. 2000).

In the assessment the following key environmental intake issues will be discussed:

- Salinity tolerance of identified marine organisms in the mixing zone
- Marine organism salinity tolerances
- Target acceptable discharge salinity
- Mixing of brine concentrate and ambient seawater issues
- Ion imbalance of brine concentrate and ambient seawater mixing issues
- Toxicity of brine concentrate and ambient seawater mixing issues
- Estimate maximum velocity at edge of mixing zone safe for aquatic life
- Concentrate disposal impacts, diffusion, and transport

Overall recommendations: To limit the environmental impacts on resident fauna, it is our opinion that the preferred discharge type would be either submerged jet diffusers or a submerged pipe. Submerged jet diffusers would be the quickest method for dilution of effluent and the preferred way to avoid hypoxia. We recommend site 3A with submerged jet diffusers as the preferred location for a discharge facility. This combination would have the least environmental impact because the discharge would be entering into a deeper and more dynamic body of water. This site and discharge type combination also appears to have the lowest overall effect on

mortality (construction and daily). Overall we recommend the following sites and discharge type combinations (in order of preference):

1. Site 3A as submerged jet diffusers
2. Site 3A as a submerged pipe
3. Site 1B as submerged jet diffusers
4. Site 1B as a submerged pipe
5. Site 4A as a surface open discharge pipe
6. Site 1A as a surface open discharge pipe – drainage ditch
7. Site 2A as submerged jet diffusers
8. Site 2A as a submerged pipe

The following is a site by site assessment of the key environmental issues from construction and operation of discharge facilities. Discharge selection matrix (Table 5) contains site-specific details and other criteria regarding to how these recommendations were determined.

Site 1: Near Broadway WWTP

Discharge location 1A is located in the Inner Harbor of Corpus Christi Bay. Corpus Christi Inner Harbor has been subject to refinery process water effluent discharge for over fifteen years. The proposed type of discharge infrastructure is a surface open discharge pipe – drainage ditch. Brine concentrate in an open-air ditch could evaporate further and become even more saline. Considering salinity alone, a discharge salinity of 2.0 parts per thousand (ppt) above ambient salinity (Table 4) would not have an effect on the marine community in the Inner Harbor. However, the conclusion from Hodges' 2015 report is that desalination brine in the ship channel would likely result in extended periods of hypoxia and anoxia. This location does not appear to have seagrass or other limiting habitat.

- **Salinity tolerance of identified marine organisms in the mixing zone**
  The salinity tolerance of marine organisms in the mixing zone is between approximately 28 and 42 ppt, with an average around 35 (Table 4).

- **Marine organism salinity tolerances**
  The Corpus Christi Bay system has natural salinities ranging from 28 - 42 ppt, with an average around 35 ppt (Van Diggelen and Montagna 2016). We know that the resident marine species can tolerate salinities within this range; however, further studies are needed to determine the effects of a localized salinity increase greater than 42 ppt.

- **Target acceptable discharge salinity**
  The target acceptable discharge salinity would need to be 35 - 42 ppt (Table 4), just above the average salinity of the bay system.

- **Mixing of brine concentrate and ambient seawater issues**
  It is unknown how the mixing of warm brine concentrate would affect the bay system, but it could lead to hypoxia. It would be recommended that the concentrate be brought as close as possible to ambient seawater temperature before being released.

- **Ion imbalance of brine concentrate and ambient seawater mixing issues**
  The concentration of copper, calcium, chlorine, and anti-scalants in the brine concentrate would need to be determined before its impact can be assessed. Fish, plankton, and benthic fauna can experience toxic effects from the bioaccumulation of metals. Research is needed to verify the potential impacts of brine concentrate mixing with seawater.

- **Toxicity of brine concentrate and ambient seawater mixing issues**
  Warm temperatures of brine plumes may affect marine species, particularly animals in early developmental stages. This site does not appear to have seagrass habitat, so there is little concern for brine concentrate affecting sensitive nursery grounds.

- **Estimate maximum velocity at edge of mixing zone safe for aquatic life**
  At the seafloor there are sluggish currents ranging from 0.01 - 0.25 meters per second (m/s) (Powell et al. 2007). The current velocity in Corpus Christi Bay is variable and wind driven at the surface. Current speed is probably very sluggish at this particular site. Brine discharged at a high velocity would promote more mixing but could negatively impact flora and fauna. We estimate the maximum velocity at the edge of mixing zone safe to aquatic life to be no more than 0.5 m/s (Powell et al. 2007).

- **Concentrate disposal impacts, diffusion and transport**
  The target acceptable discharge salinity would need to be close to 35 ppt, and no higher than 42 ppt. Field and laboratory studies would need to be conducted to investigate the environmental impacts of warm brine plumes with high concentration of heavy metals. A brine plume at this site would probably lead to hypoxia.

Discharge location 1B is located in Corpus Christi Bay in the Ship Channel near Harbor Bridge. The proposed types of discharge infrastructure are submerged pipe and submerged jet diffusers. This site has previously been described as a depositional zone for material coming from the Inner Harbor (Carr et al. 1998). A submerged pipe would release a brine plume at the sediment surface of the bay. This pipe would be subject to fouling by sessile marine organisms such as serpulid worms and tunicates. Discharge location 1B may experience more wind-driven mixing than location 1A, potentially mixing up the brine plume released from a submerged pipe. However, hypoxia could still develop from the brine plume. Submerged jet diffusers are an alternative

discharge type that prevents the formation of dense brine plumes. Turbidity from jet diffusers can cause developmental and filtration problems in bivalves because it is generally known that filter feeders can be clogged in highly turbid environments.

- **Salinity tolerance of identified marine organisms in the mixing zone**
  The salinity tolerance of marine organisms in the mixing zone is between approximately 28 and 42 ppt, with an average around 35.

- **Marine organism salinity tolerances**
  The Corpus Christi Bay system has natural salinities ranging from 28 - 42 ppt, with an average around 35 ppt. We know that the resident marine species can tolerate salinities within this range; however, further studies are needed to determine the effects of a localized salinity increase greater than 42 ppt.

- **Target acceptable discharge salinity**
  The target acceptable discharge salinity would need to be 35 - 42 ppt. It would be easier to reach the target acceptable discharge salinity using submerged jet diffusers.

- **Mixing of brine concentrate and ambient seawater issues**
  It is unknown how the mixing of warm brine concentrate would affect the bay system. It would be recommended that the concentrate be brought as close as possible to ambient seawater temperature before being released. A submerged pipe would create a brine plume at the sediment surface, which could lead to hypoxia if not thoroughly mixed in. Submerged jet diffusers would be the preferred option to achieve optimal mixing of brine concentrate and seawater.

- **Ion imbalance of brine concentrate and ambient seawater mixing issues**
  The concentration of copper, calcium, chlorine, and anti-scalants in the brine concentrate would need to be determined before its impact can be assessed. Fish, plankton, and benthic fauna can experience toxic effects from the bioaccumulation of metals. Sessile organisms would be subject to stress from ion imbalance as they cannot relocate. Submerged jet diffusers would be the preferred option to promote mixing and dilution of brine concentrate and seawater.

- **Toxicity of brine concentrate and ambient seawater mixing issues**
  Warm temperatures of brine plumes may affect marine species, particularly animals in early developmental stages. This site does not appear to have seagrass habitat, so there is little concern for brine concentrate affecting sensitive nursery grounds at this site. Research is needed to verify the toxicological effects of brine concentrate mixing with seawater.

- **Estimate maximum velocity at edge of mixing zone safe for aquatic life**
  We estimate the maximum velocity at the edge of mixing zone safe to aquatic life to be no more than 0.5 m/s (Powell et al. 2007). Although marine life would only be exposed to diffuser jet turbulence for short bursts of time, on the order of seconds, we recommend conducting laboratory studies to determine a velocity that minimizes shear stress mortality (Foster et al. 2013).

- **Concentrate disposal impacts, diffusion, and transport**
  The target acceptable discharge salinity would need to be close to 35 ppt, and no higher than 42 ppt. Field and laboratory studies would need to be conducted to investigate the environmental impacts of warm brine plumes with high concentration of heavy metals. A brine plume at this site could lead to hypoxia. Submerged jet diffusers would be the preferred option to achieve optimal mixing of brine concentrate and seawater.

Site 2: La Quinta Channel Extension

Discharge location 2A is located southwest of La Quinta Channel Extension in Corpus Christi Bay. The proposed types of discharge infrastructure are submerged pipe and submerged jet diffusers. Nearby tidal flats, salt marshes, and seagrass beds are inhabited by protected bird species and used as recruitment areas by recreationally important fish species. Green sea turtles, bottlenose dolphins, and manatees have been observed in La Quinta Channel. Hypoxia or anoxia would occur as a result of submerged pipe brine plume discharge. This site would have the most severe environmental impacts and would not be recommended for the construction of a discharge facility.

- **Salinity tolerance of identified marine organisms in the mixing zone**
  The salinity tolerance of marine organisms in the mixing zone is between approximately 28 and 42 ppt, with an average around 35.

- **Marine organism salinity tolerances**
  The Corpus Christi Bay system has natural salinities ranging from 28 - 42 ppt, with an average around 35 ppt. We know that the resident marine species can tolerate salinities within this range; however, further studies are needed to determine the effects of a localized salinity increase greater than 42 ppt.

- **Target acceptable discharge salinity**
  The target acceptable discharge salinity would need to be 35 - 42 ppt. It would be easier to reach the target acceptable discharge salinity using submerged jet diffusers.

- **Mixing of brine concentrate and ambient seawater issues**
  Submerged jet diffusers dilute and disperse brine through rapid mixing, decreasing the possibility or extent of hypoxic zones.

- **Ion imbalance of brine concentrate and ambient seawater mixing issues**
  The concentration of copper, calcium, chlorine, and anti-scalants in the brine concentrate would need to be determined before its impact can be assessed. Fish, plankton, and benthic fauna can experience toxic effects from the bioaccumulation of metals. Sessile organisms would be subject to stress from ion imbalance as they cannot relocate. Submerged jet diffusers would be the preferred option to promote mixing and dilution of brine concentrate and seawater.

- **Toxicity of brine concentrate and ambient seawater mixing issues**
  Warm temperatures of brine plumes may affect marine species, particularly those in early developmental stages. This site has seagrass habitat that is potentially a recruitment area for many estuarine species. Discharge from a submerged pipe could be particularly detrimental by causing hypoxia. Submerged jet diffusers could create turbidity, affecting the phytoplankton community and shading out seagrass. A discharge facility at this site could have severe environmental impacts. More research is needed to verify the toxicological effects of brine concentrate mixing with seawater.

- **Estimate maximum velocity at edge of mixing zone safe for aquatic life**
  If the submerged jet diffuser was installed at the bottom of the 35 foot trench, as proposed, a velocity of 2 - 3 fps at the edge of the mixing zone would be acceptable. However, if the submerged jet diffuser was installed at the average seafloor depth of about 3 meters, there could be severe environmental impacts, as mentioned above. We estimate the maximum velocity at the edge of mixing zone safe to aquatic life to be no more than 0.5 m/s (Powell et al. 2007). Although marine life would only be exposed to diffuser jet turbulence for short bursts of time, on the order of seconds, we recommend conducting laboratory studies to determine a velocity that minimizes shear stress mortality (Foster et al. 2013).

- **Concentrate disposal impacts, diffusion, and transport**
  The target discharge salinity would need to be close to 35 ppt, and no higher than 42 ppt. Field and laboratory studies would need to be conducted to investigate the environmental impacts of warm brine plumes with high concentration of heavy metals. A brine plume at this site would probably lead to hypoxia. A submerged pipe is also subject to fouling by sessile marine organisms such as serpulid worms and tunicates. Submerged jet diffusers

would be the preferred option to achieve optimal mixing of brine concentrate and seawater.

Site 3: Mustang Island or Padre Island

Discharge location 3A is located 2 miles offshore of either Mustang Island or Padre Island. The proposed types of discharge infrastructure are submerged pipe or submerged jet diffusers. This is the preferred choice for a discharge site because the brine effluent would be rapidly mixed into the ambient seawater and have the least environmental impact. Kemp's ridley, loggerhead, green and leatherback turtles as well as bottlenose dolphins have been recorded at this site. It is unlikely that these species would be affected by the discharge.

- **Salinity tolerance of identified marine organisms in the mixing zone**
  The salinity tolerance of marine organisms in the mixing zone is between approximately 32 and 36 ppt, with an average of 35 ppt.

- **Marine organism salinity tolerances**
  The Gulf of Mexico has natural salinities ranging from 32 - 36 ppt, with an average around 35 ppt. We know that the resident marine species can tolerate salinities within this range; however, further studies are needed to determine the effects of a localized salinity increase greater than 36 ppt.

- **Target acceptable discharge salinity**
  The target acceptable discharge salinity would need to be 35 - 38 ppt. It would be easier to reach the target acceptable discharge salinity using submerged jet diffusers.

- **Mixing of brine concentrate and ambient seawater issues**
  The discharge of brine concentrate from a submerged pipe is expected to mix well with ambient seawater. Submerged jet diffusers would be the preferred option for quickest dilution and least environmental impact.

- **Toxicity of brine concentrate and ambient seawater mixing issues**
  It is not anticipated that there would be issues with brine concentrate toxicity at this site. Effluent would be thoroughly mixed in through wind-driven mixing and tidal currents.

- **Ion imbalance of brine concentrate and ambient seawater mixing issues**
  The concentration of copper, calcium, chlorine, and anti-scalants in the brine concentrate would need to be determined before its impact can be assessed. Fish, plankton, and benthic fauna can experience toxic effects from the bioaccumulation of metals. Sessile organisms would be subject to stress from ion imbalance as they cannot relocate.

Submerged jet diffusers would be the preferred option to promote mixing and dilution of brine concentrate and seawater.

- **Estimate maximum velocity at edge of mixing zone safe for aquatic life**
  The average current velocity near Bob Hall Pier is between 0.5 and 1.0 m/s. The current velocity offshore at this discharge site changes every day. We estimate the maximum velocity at the edge of mixing zone safe to aquatic life to be no more than 1.5 m/s (Powell et al. 2007).

- **Concentrate disposal impacts, diffusion and transport**
  The target discharge salinity would need to be close to 35 ppt, and no higher than 36 ppt. Field and laboratory studies would need to be conducted to investigate the environmental impacts of warm brine plumes with high concentration of heavy metals. A submerged pipe is also subject to fouling by sessile marine organisms such as serpulid worms and tunicates. Submerged jet diffusers would be the preferred option to achieve optimal mixing of brine concentrate and seawater.

Site 4: ON Stevens WTP

Discharge location 4A is at the Tule Lake Turning Basin in the Inner Harbor of Corpus Christi Bay. The proposed discharge infrastructure is a surface open discharge pipe. Considering salinity alone, a discharge salinity of 2.0 ppt above ambient salinity would not have an effect on the marine community in the Inner Harbor. However, the conclusion from Hodges' 2015 report is that desalination brine released in the ship channel would likely result in extended periods of hypoxia and anoxia. This location does not appear to have seagrass or other limiting habitat.

- **Salinity tolerance of identified marine organisms in the mixing zone**
  The salinity tolerance of marine organisms in the mixing zone is between approximately 28 and 42 ppt, with an average around 35 ppt.

- **Marine organism salinity tolerances**
  The Corpus Christi Bay system has natural salinities ranging from 28 - 42 ppt, with an average around 35 ppt. We know that the resident marine species can tolerate salinities within this range; however, further studies are needed to determine the effects of a localized salinity increase greater than 42 ppt.

- **Target acceptable discharge salinity**
  The target acceptable discharge salinity would need to be 35 - 42 ppt.

- **Mixing of brine concentrate and ambient seawater issues**

A surface open discharge pipe would release brine concentrate directly into the bay. The dense concentrate would settle at the bottom of the harbor and cause hypoxia.

- **Ion imbalance of brine concentrate and ambient seawater mixing issues**
  The concentration of copper, calcium, chlorine, and anti-scalants in the brine concentrate would need to be determined before its impact can be assessed. Fish, plankton, and benthic fauna can experience toxic effects from the bioaccumulation of metals. Sessile organisms would be subject to stress from ion imbalance as they cannot relocate.

- **Toxicity of brine concentrate and ambient seawater mixing issues**
  Warm temperatures of brine plumes may affect marine species, particularly animals in early developmental stages. This site does not appear to have seagrass habitat or recreational fish species, so there is little concern for brine concentrate affecting sensitive nursery grounds.

- **Estimate maximum velocity at edge of mixing zone safe for aquatic life**
  At the seafloor there are sluggish currents ranging from 0.01 - 0.25 m/s. The current velocity in Corpus Christi Bay is variable and wind driven at the surface. Current speed is probably very sluggish at this particular site. Brine discharged at a high velocity would promote more mixing but could negatively impact flora and fauna. We estimate the maximum velocity at the edge of mixing zone safe to aquatic life to be no more than 0.5 m/s (Powell et al. 2007).

- **Concentrate disposal impacts, diffusion, and transport**
  The target acceptable discharge salinity would need to be close to 35 ppt, and no higher than 42 ppt. Field and laboratory studies would need to be conducted to investigate the environmental impacts of warm brine plumes with high concentration of heavy metals. A brine plume at this site would probably lead to hypoxia.

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Figure 1. Intake Assessment Locations

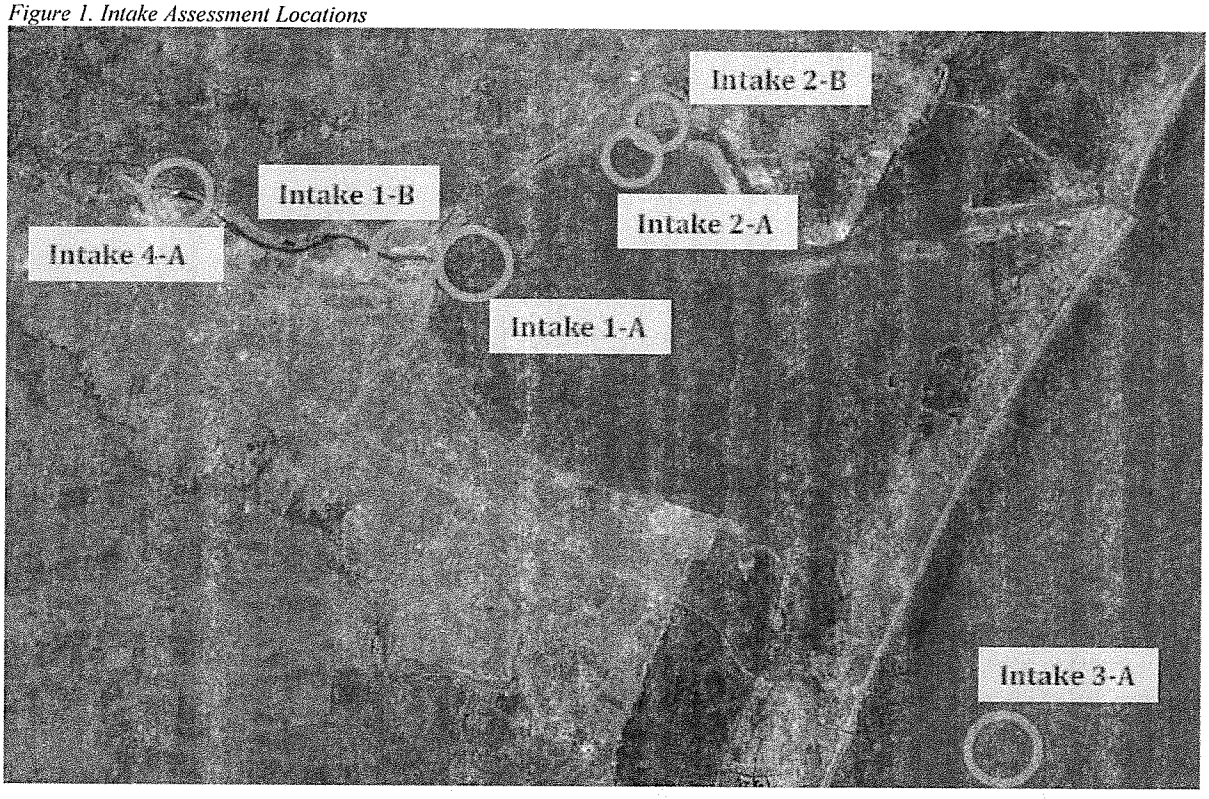


Figure 2. Discharge Assessment Locations

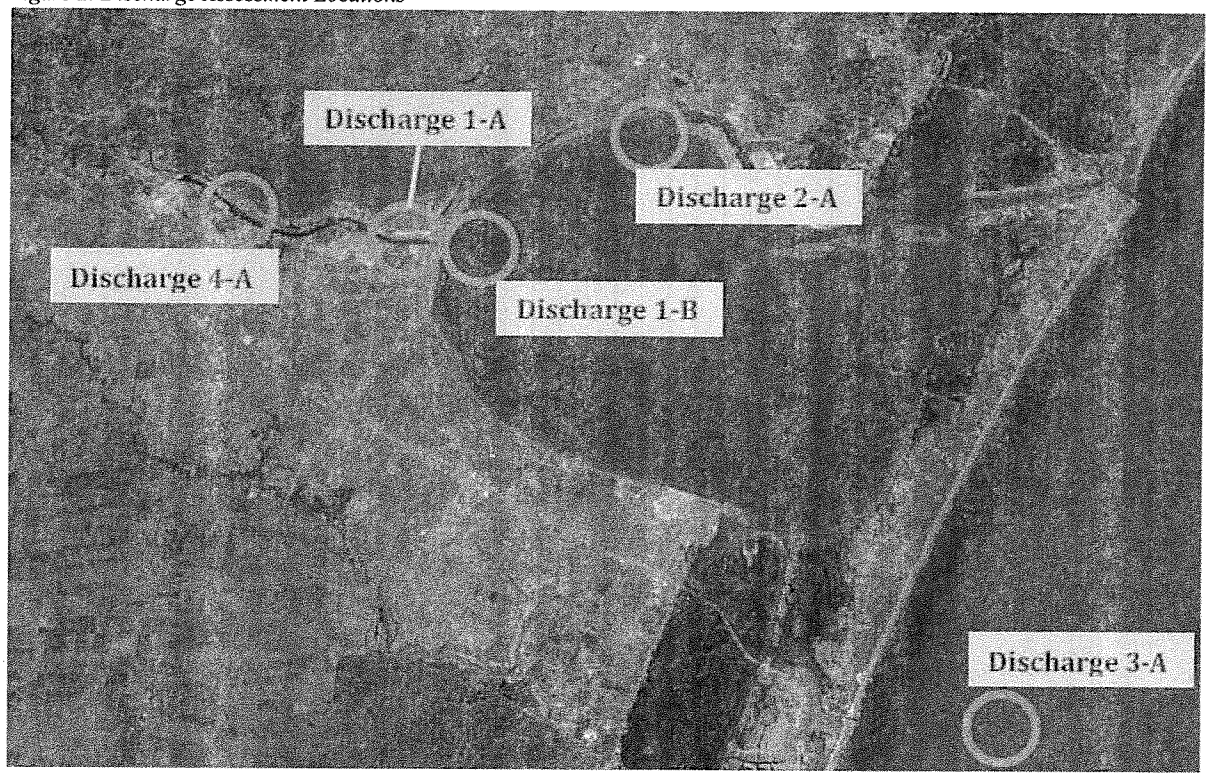


Table 1. ***Intake type and site location recommendations. A total impact score is given for each intake and the sites are color coded by recommendation level.***

Intake Matrix	Site 3A Mustang or Padre Islands	Site 1A CC Bay by CC Harbor	Site 4A Viola Turning Basin	Site 1B CC Turning Basin, Inner Harbor	Site 2A West of Spoil Island	Site 2B Shoreline near La Quinta Channel
Subsurface Intake			N/A	N/A		N/A
Impingement of Marine Life	0	0	N/A	N/A	0	N/A
Entrainment of Marine Life	0	0	N/A	N/A	0	N/A
Impacts on Submerged Aquatic Vegetation	2	2	N/A	N/A	3	N/A
Impacts on Other Sensitive Marine Areas	0	0	N/A	N/A	3	N/A
Visual Impacts	0	0	N/A	N/A	2	N/A
Disturbances of Coastal Uses	1	2	N/A	N/A	2	N/A
Impacts on Coastal Wetlands	0	0	N/A	N/A	3	N/A
Other Environmental Issues	0	0	N/A	N/A	2	N/A
Total Impact Score	**3**	**4**	N/A	N/A	**15**	N/A
Off-shore, Open Intake			N/A	N/A		N/A
Impingement of Marine Life	2	2	N/A	N/A	3	N/A
Entrainment of Marine Life	2	2	N/A	N/A	3	N/A
Impacts on Submerged Aquatic Vegetation	2	2	N/A	N/A	3	N/A
Impacts on Other Sensitive Marine Areas	0	0	N/A	N/A	3	N/A
Visual Impacts	0	0	N/A	N/A	2	N/A
Disturbances of Coastal Uses	1	2	N/A	N/A	2	N/A
Impacts on Coastal Wetlands	0	0	N/A	N/A	3	N/A
Other Environmental Issues	0	0	N/A	N/A	2	N/A
Total Impact Score	**7**	**8**	N/A	N/A	**21**	N/A
On-shore, Open Intake	N/A	N/A			N/A	
Impingement of Marine Life	N/A	N/A	3	3	N/A	3
Entrainment of Marine Life	N/A	N/A	3	3	N/A	3
Impacts on Submerged Aquatic Vegetation	N/A	N/A	1	1	N/A	3
Impacts on Other Sensitive Marine Areas	N/A	N/A	0	0	N/A	3
Visual Impacts	N/A	N/A	2	2	N/A	3
Disturbances of Coastal Uses	N/A	N/A	0	1	N/A	3
Impacts on Coastal Wetlands	N/A	N/A	2	2	N/A	3
Other Environmental Issues	N/A	N/A	0	0	N/A	2
Total Impact Score	N/A	N/A	**11**	**12**	N/A	**23**

Impact Factor:	Recommendation Key (based on the impact factor scores)
0 - No Impact	Preferred
1 - Minimal Impact	Alternative
2 - Moderate Impact	Least Favorable
3 - Severe Impact	Not Applicable

Table 2. ***Preliminary list of fish and invertebrates that could potentially be impacted by local intake systems. Further study is needed before a site specific list can be created.***

Fish		Crustaceans	
Common Name	**Scientific Name**	**Common Name**	**Scientific Name**
American Halfbeak	*Hyporhamphus meeki*	Blue Crab	*Callinectes sapidus*
Atlantic Brief Squid	*Lolliguncula brevis*	Gulf Crab	*Callinectes similis*
Atlantic Bumper	*Chloroscombrus chrysurus*	Brown Shrimp	*Farfantepenaeus aztecus*
Atlantic Croaker	*Micropogonias undulatas*	Pink Shrimp	*Farfantepenaeus duorarum*
Bay Anchovy	*Anchoa mitchilli*	White Shrimp	*Litopenaeus setiferus*
Black Drum	*Pogonias cromis*	Cleaner Shrimp	*Hippolytidae*
Blue Fish	*Pomatomus saltatrix*	Grass Shrimp	*Palaemonidae*
Code Goby	*Gobiosoma robustum*	Mysid Shrimp	*Mysidae*
Darter Goby	*Ctenogobius boleosoma*		
Feather Blenny	*Hypsoblennius hentz*		
Green Goby	*Microgobius thalassinus*		
Gulf Flounder	*Paralichthys albigutta*		
Gulf Menhaden	*Brevoortia patronus*		
Hogchoaker	*Trinectes maculatas*		
Inshore Lizardfish	*Synodus foetens*		
Ladyfish	*Elops saurus*		
Lizardfish	*Synodontidae sp.*		
Naked Goby	*Gobiosoma bosc*		
Pinfish	*Lagodon rhomboides*		
Pipefish	*Syngnathidae sp.*		
Puffer Fish	*Tetradontidae sp.*		
Red Drum	*Sciaenops ocellatus*		
Sand Seatrout	*Cynoscion arenarius*		
Sea Robin	*Triglidae sp.*		
Shrimp eel	*Ophichthus gomesii*		
Silver Perch	*Bairdiella chrysoura*		
Silversides	*Menidia sp.*		
Skilletfish	*Gobiesox strumosus*		
Southern Flounder	*Paralichthys lethostigma*		
Spot Croaker	*Leiostomus xanthurus*		
Spotfin Mojarra	*Eucinostomus argenteus*		
Spotted Seatrout	*Cynoscion nebulosus*		
Striped Mullet	*Mugil cephalus*		
Stripped Burrfish	*Chilomycterus schoepfi*		
Tarpon	*Megalops atlanticus*		

Table 3. Marine species list of bottom dwellers for Corpus Christi Bay. Adapted from Table 12 of Sediment Quality Assessment of Storm Water Outfalls and other Selected Sites in the Corpus Christi Bay National Estuary Program Study Area. Corpus Christi Bay National Estuary Program - CCBNEP-32, September 1998.

Phylu	Class/Order	Species
Anthozoa		unidentified Anthozoans
Turbellaria		unidentified Turbellaria
Nermertinea		*Phoronis architecta*
Mollusca	Gastropoda	*Acteocina canaliculata*
		Cyclinella tenuis
		Crepidula sp
		Crepidula plana
		unidentified Vitrinellidae
		Caecum pulchellum
		Nassarius acutus
		Nassarius vibex
		Anachis obesa
		Pyrgiscus sp.
	Pelecypoda	unidentified Pelecypoda
		Nuculana acuta
		Aligena texasiana
		Mysella planulata
		Mulinia lateralis
		Abra aequalis
		Cumingia tellinoides
		Tagelus divisus
		Anomalocardia auberiana
		Chione cancellata
		Lyonsia hyalina floridana
		Periploma margaritaceum
Annelida	Polychaeta	*Malmgreniella taylori*
		Paleanotus heteroseta
		Paramphinome jeffreysii
		Mystides rarica
		Eteone heteropoda
		Cabira incerta
		Ancistrosyllis groenlandica
		Sigambra sp.
		Gyptis vittata
		Microphthalmus abberrans
		Syllis cornuta
		Exogone sp.
		Brania clavata
		Sphaerosyllis sp. A

Phylu	Class/Order	Species
Annelida	Polychaeta	unidentified Syllidae
Annelida	Polychaeta	*Ceratonereis irritabilis*
		Laeonereis culveri
		unidentified Nereidae
		Glycinde solitaria
		Lysidice ninetta
		Diopatra cuprea
		Onuphis eremita
		Lumbrineris parvapedata
		Drilonereis magna
		Schistomeringos rudolphi
		Schistomeringos sp. A
		Polydora ligni
		Paraprionospio pinnata
		Apoprionospio pygmaea
		Prionospio heterobranchia
		Scolelepis texana
		Spiophanes bombyx
		Spio pettiboneae
		Polydora socialis
		Streblospio benedicti
		Polydora caulleryi
		Polydora sp.
		Magelona pettiboneae
		Magelona phyllisae
		Magelona rosea
		Spiochaetopterus costarum
		Tharyx setigera
		Cossura delta
		Haploscoloplos foliosus
		Scolopus rubra
		Haploscoloplos sp.
		Naineris sp. A
		Aricidea fragilis
		Cirrophorus lyra
		Aricidea catharinae
		Paraonis fulgens
		Armandia agilis
		Armandia maculata
		Capitella capitata
		Notomastus latericeus
		Notomastus cf. latericeus

Phylu	Class/Order	Species
Annelida	Polychaeta	*Mediomastus ambiseta*
		unidentified Capitellidae
Annelida	Polychaeta	*Branchioasychis americana*
		Clymenella torquata
		Asychis elongata
		Euclymene sp. B
		Axiothella mucosa
		Axiothells sp. A
		unidentified Maldanidae
		Isolda pulchella
		Melinna maculata
		unidentified Terebellidae
		Fabricia sp. A
		Chone sp.
		Megalomma bioculatum
		Pomatoceros americanus
		Eupomatus dianthus
		Eupomatus protulicola
Oligochaeta		unidentified Oligochaetes
Sipuncula		*Phascolion strombi*
Crustacea	Branchiopoda	*Latonopsis occidentalis*
	Ostracoda	*Sarsiella texana*
		Sarsiella zostericola
	Copepoda	*Pseudodiaptomus coronatus*
	Branchiura	*Argissa hamatipes*
	Malacostraca	*Pagurus annulipes*
		Pagurus longicarpus
		Pinnixa sp.
		Megalops
	Cumacea	*Leptocuma* sp.
	Amphipoda	unidentified Amphipoda
		Ampelisca sp. B
		Ampelisca abdita
		Synchelidium americanum
		Erichthonias brasiliensis
		Corophium ascherusicum
		Corophium louisianum
		Microprotopus sp.
		Grandidierella bonnieroides
		Batea catharinensis
		Listriella clymenellae
		Caprellidae sp.

Phylu	Class/Order	Species
	Amphipoda	*Amphilochus* sp.
Crustacea	Isopoda	*Xenanthura brevitelson*
		Idotea montosa
Crustacea	Tanaidacea	*Leptochelia rapax*
Echinodermata	Ophiuroidea	unidentified Ophiuroidea
	Holothuroidea	*Thyome mexicana*
Chordata	Urochordata	unidentified Ascidiacea
	Hemichordata	*Schizocardium* sp.

Table 4. Selected references for salinity effects on estuarine macrobenthic and epibenthic organisms.

Authors	Organism(s) Studied	Study Location	Salinity Tolerance Results
Chadwick & Feminella (2001)	Burrowing mayfly *Hexagenia limbata*	USA (Alabama)	Laboratory bioassays showed that *H. limbata* nymphs could survive elevated salinities (LC50 of 6.3 ppt at 18 °C, 2.4 ppt at 28 °C). Similar growth rates at 0,2,4, & 8 ppt.
Saoud & Davis (2003)	Juvenile brown shrimp *Farfantepenae us aztecus*	USA (Alabama)	Growth significantly higher at salinities of 8 & 12 ppt than at salinities of 2 and 4 ppt.
Tolley et al. (2006)	Oyster reef communities of decapod crustaceans & fish	USA (Florida)	Upper stations (~20 ppt) and stations near high-flow tributaries (6-12 m^3 s^{-1}) were typified by decapod *Eurypanopeus depressus* & gobiid fishes. Downstream stations (~30 ppt) and stations near low-flow tributaries (0.2-2 m^3 s^{-1}) were typified by decapods *E*
Montagna et al. (2008a)	Southwest Florida mollusc communities	USA (Florida)	*Corbicula fluminea*, *Rangia cuneata*, & *Neritina usnea* only species to occur < 1 psu. *R. cuneata* good indicator of mesohaline salinity zones with tolerence to 20 psu. Gastropod *N. usnea* common in fresh to brackish salinities. *Polymesoda caroliniana*
Montague & Ley (1993)	Submersed vegetation & benthic animals	USA (Florida)	Mean salinity ranged from ~11-31 ppt. Standard deviation of salinity was best environmental correlate of mean plant biomass and benthic animal diversity. Less biota at stations with greater fluctuations in salinity. For every 3 ppt increase in standard

Authors	Organism(s) Studied	Study Location	Salinity Tolerance Results
Rozas et al. (2005)	Estuarine macrobenthic community	USA (Louisiana)	Increased density and biomass with increases in freshwater inflow and reduced salinities. Salinity ranged from 1-13 psu.
Finney (1979)	Harpacticoid copepods *Tigriopus japonicus*, *Tachidius brevicornis*, *Tisbe sp.*	USA (Maryland)	All species tested for response to salinities from 0-210 ppt. *Tigriopus* became dormant at 90 ppt died at 150 ppt. *Tachidius* became dormant at 60 ppt, died at 150 ppt. *Tisbe* died shortly after exposure to 45 ppt.
Kalke & Montagna (1991)	Estuarine macrobenthic community	USA (Texas)	Chironomid larvae & polychaete *Hobsonia florida*: increased densities after freshwater inflow event (1-5 ppt). Mollusks *Mulinia lateralis & Macoma mitchelli:* increased densities & abundance during low flow event (~20 ppt). *Streblospio benedicti & Medioma*
Keiser & Aldrich (1973)	Postlarval brown shrimp *Penaeus aztecus*	USA (Texas)	Shrimp selected for salinities between 5-20 ppt.
Montagna et al. (2002b)	Estuarine macrobenthic community	USA (Texas)	Macrofauna increased abundances, biomass & diversity with increased inflow; decreased during hypersaline conditions. Macrofaunal biomass & diversity had nonlinear bell-shaped relationship with salinity: maximum biomass at ~19 ppt
Zein-Eldin (1963)	Postlarval brown shrimp	USA (Texas)	In laboratory experiments with temperatures 24.5-26.0 °C, postlarvae grew equally well in salinities of 2-40 ppt.

Authors	Organism(s) Studied	Study Location	Salinity Tolerance Results
	Penaeus aztecus		
Zein-Eldin & Aldrich (1965)	Postlarval brown shrimp *Penaeus aztecus*	USA (Texas)	In laboratory experiments with temperatures < 15 °C, postlarval survivial decreased in salinities < 5 ppt.
Allan et al. (2006)	Caridean shrimp *Palaemon peringueyi*	South Africa	At constant salinity of 35 ppt, respiration rate increased with increased temperature. At constant temperature of 15 °C, respiration rate increased with increased salinity.
Ferraris et al. (1994)	Snapping shrimp *Alpheus viridari*, Polychaete *Terebellides parva*, sipunculan *Golfingia cylindrata*	Belize	Organisms subjected to acute, repeated exposure to 25, 35, or 45 ppt. *A. viridari* hyperosmotic conformer at decreased salinity, but osmoconformer at increased saliniry. *G. cylindrata* always osmoconformer. *T. parva* always osmoconformer; decreased survival.
Lercari et al. (2002)	Sandy beach macrobenthic community	Uruguay	Abundance, biomass, species richness, diversity & evenness significantly increased from salinity of ~6 ppt to salinity of ~25 ppt.
Chollett & Bone (2007)	Estuarine macrobenthic community	Venezuela	Immediately after heavy rainfall (~25 psu), spionid polychaetes showed large increases in density & richness versus normal values (~41 psu).

Authors	Organism(s) Studied	Study Location	Salinity Tolerance Results
Dahms (1990)	Harpacticoid copepod *Paramphiascella fulvofasciata*	Germany (Helgoland)	After 2 hours, no mortality in salinities of 25-55 ppt. Almost all displayed dormant behavior < 20 ppt and > 55 ppt.
McLeod & Wing (2008)	Bivalves *Austrovenus stutchburyi* & *Paphies australis*	New Zealand	Sustained exposure (> 30 d) to salinity < 10 ppt significantly decreased survivorship.
Rutger & Wing (2006)	Esturaine macroinfaunal community	New Zealand	Infaunal community in low salinity regions (2-4 ppt) showed low species richness & abundance of bivalves, decapods, & Orbiniid polychaetes, but high abundance of amphipods & Nereid polychaetes compared to higher salinity regions (12-32 ppt).
Drake et al. (2002)	Estuarine macrobenthic community	Spain	Species richness, abundance, and biomass decreased in the upstream direction, positively correlated with salinity. Highly significant spatial variation in macrofaunal communities along the salinity gradient. Salinity range: 0-40 ppt.
Normant & Lamprecht (2006)	Benthic amphipod *Gammarus oceanicus*	Baltic Sea	Low salinity basin (5-7 psu). Physiological performance examined from 5-30 psu. Feeding & metabolic rates decreased with increasing salinity; nutritive absorption increased. Faeces productoin & ammonia excretion rates decreased strongly from lowest to

Table 5. Discharge matrix

Discharge Matrix	Site 3A Mustang or Padre Islands	Site 1B CC Turning Basin, Inner Harbor	Site 4A Tule Lake Turning Basin	Site 1A CC Bay by CC Harbor	Site 2A SW of La Quinta Channel
Surface Open Discharge Drainage Ditch					
Marine Species in Estimated Mixing Zone	N/A	N/A	N/A		N/A
Organisms in Water Column	N/A	N/A	N/A	1	N/A
Bottom Dwellers	N/A	N/A	N/A	1	N/A
Endangered Species	N/A	N/A	N/A	0	N/A
Salinity Tolerance of Identified Organisms in Mixing Zone	N/A	N/A	N/A	2	N/A
Target Acceptable Discharge Salinity	N/A	N/A	N/A	3	N/A
Mixing of Brine Concentrate and Ambient Seawater Mixing Issues	N/A	N/A	N/A	2	N/A
Ion Imbalance of Brine Concentrate and Ambient Seawater Mixing Issues	N/A	N/A	N/A	2	N/A
Toxicity of Brine Concentrate and Ambient Seawater Mixing Issues	N/A	N/A	N/A	3	N/A
Estimate Maximum Velocity at Edge of Mixing Zone, Safe to Aquatic Life	N/A	N/A	N/A	1	N/A
Other Environmental Issues	N/A	N/A	N/A	2	N/A
Total Impact Score	N/A	N/A	N/A	17	N/A
Off-shore, Submerged Pipe Discharge					
Marine Species in Estimated Mixing Zone			N/A	N/A	
Organisms in Water Column	0	1	N/A	N/A	3
Bottom Dwellers	1	1	N/A	N/A	3
Endangered Species	0	0	N/A	N/A	1
Salinity Tolerance of Identified Organisms in Mixing Zone	1	1	N/A	N/A	3
Target Acceptable Discharge Salinity	1	1	N/A	N/A	3
Mixing of Brine Concentrate and Ambient Seawater Mixing Issues	0	2	N/A	N/A	3
Ion Imbalance of Brine Concentrate and Ambient Seawater Mixing Issues	0	1	N/A	N/A	3
Toxicity of Brine Concentrate and Ambient Seawater Mixing Issues	1	2	N/A	N/A	3
Estimate Maximum Velocity at Edge of Mixing Zone, Safe to Aquatic Life	0	1	N/A	N/A	2
Other Environmental Issues	1	1	N/A	N/A	3
Total Impact Score	5	11	N/A	N/A	27

Impact Factor:	Recommendation Key (based on the impact factor scores)
0 - No Impact	Preferred
1 - Minimal Impact	Alternative
2 - Moderate Impact	Least Favorable
3 - Severe Impact	Not Applicable

Table 5 (cont). Discharge matrix

Discharge Matrix	Site 3A Mustang or Padre Islands	Site 1B CC Turning Basin, Inner Harbor	Site 4A Tule Lake Turning Basin	Site 1A CC Bay by CC Harbor	Site 2A SW of La Quinta Channel
Off-shore, Submerged Jet Diffusers Discharge					
Marine Species in Estimated Mixing Zone			N/A	N/A	
Organisms in Water Column	0	1	N/A	N/A	3
Bottom Dwellers	1	1	N/A	N/A	3
Endangered Species	0	0	N/A	N/A	1
Salinity Tolerance of Identified Organisms in Mixing Zone	1	1	N/A	N/A	3
Target Acceptable Discharge Salinity	1	1	N/A	N/A	3
Mixing of Brine Concentrate and Ambient Seawater Mixing Issues	0	2	N/A	N/A	3
Ion Imbalance of Brine Concentrate and Ambient Seawater Mixing Issues	0	1	N/A	N/A	3
Toxicity of Brine Concentrate and Ambient Seawater Mixing Issues	1	2	N/A	N/A	3
Estimate Maximum Velocity at Edge of Mixing Zone, Safe to Aquatic Life	0	1	N/A	N/A	2
Other Environmental Issues	1	1	N/A	N/A	3
Total Impact Score	5	11	N/A	N/A	27
Surface Open Discharge Pipe					
Marine Species in Estimated Mixing Zone	N/A	N/A		N/A	N/A
Organisms in Water Column	N/A	N/A	1	N/A	N/A
Bottom Dwellers	N/A	N/A	1	N/A	N/A
Endangered Species	N/A	N/A	0	N/A	N/A
Salinity Tolerance of Identified Organisms in Mixing Zone	N/A	N/A	2	N/A	N/A
Target Acceptable Discharge Salinity	N/A	N/A	2	N/A	N/A
Mixing of Brine Concentrate and Ambient Seawater Mixing Issues	N/A	N/A	3	N/A	N/A
Ion Imbalance of Brine Concentrate and Ambient Seawater Mixing Issues	N/A	N/A	2	N/A	N/A
Toxicity of Brine Concentrate and Ambient Seawater Mixing Issues	N/A	N/A	3	N/A	N/A
Estimate Maximum Velocity at Edge of Mixing Zone, Safe to Aquatic Life	N/A	N/A	2	N/A	N/A
Other Environmental Issues	N/A	N/A	1	N/A	N/A
Total Impact Score	N/A	N/A	17	N/A	N/A

Impact Factor:	Recommendation Key (based on the impact factor scores)
0 - No Impact	Preferred
1 - Minimal Impact	Alternative
2 - Moderate Impact	Least Favorable
3 - Severe Impact	Not Applicable

Melissa Schmidt

From: PUBCOMMENT-OCC
Sent: Wednesday, July 14, 2021 9:06 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630
Attachments: 21-07-13 WR 13630 Comments DHoffman1.pdf

H

From: donnaleehoffman@gmail.com <donnaleehoffman@gmail.com>
Sent: Tuesday, July 13, 2021 8:21 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER: 2021-0421-WR

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Donna L Hoffman

E-MAIL: donnaleehoffman@gmail.com

COMPANY:

ADDRESS: 1500 GREGORY ST N/A
AUSTIN TX 78702-2732

PHONE: 5122995776

FAX:

COMMENTS: See attached PDF.

Donna Hoffman
donnalechoffman@gmail.com
1500 Gregory St.
Austin TX 78702
512-299-5776

July 13, 2021

Water Rights Permitting Team
c/o Brad Patterson
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, TX 78753

Re: Port of Corpus Christi Authority of Nueces County
Application for a Water Rights Permit, WR 13630

TCEQ Water Rights Permitting Team Members:

These are my comments on the above-referenced permit application WR 13630.

Relationship to the Area
My name is Donna Hoffman. I'm a fifth-generation coastal Texan from Corpus Christi, Texas. My mother, brother and sister-in-law, nephews and nieces, and friends live in Corpus Christi presently. I visit them regularly and friends who live near the proposed site.

My father enjoyed recreational fishing in the bay from his childhood and throughout his life and I experienced the joy of fishing with him and our family in the bay during my childhood. I am a recreational kayaker. I have kayaked in close proximity to the proposed location and plan to visit and enjoy recreational activities there in the future.

I am also aware of the history of La Quinta Channel as an excellent wind area used by the kite surfing community.

I have studied and interpreted environmental science professionally for almost forty years and I understand the value of the people, wildlife and economy of the natural ecosystems and the threat that this desalination proposal represents.

Opposed to Project
Along with many other Coastal Bend residents, scientists, and visitors, I oppose the permit application WR13630 by the Port of Corpus Christi Authority of Nueces County.

I am requesting both an extension of the commenting period and a contested case hearing on WR13630.

Significant Rationale

There are many science based reasons why any desalination project anywhere on Corpus Christi Bay including La Quinta Channel is a terrible idea and must be halted and rejected in favor of protecting the bay's wildlife, people, and economy. Following this list of reasons that many residents have studied in documentation and presentations by experts, **Below the following list, I state additional reasons relating to national security and economics.**

- **Intake Fish Kill**: Desal will harm fish and aquatic life on intake (through impingement and entrainment) with such a high volume of water sucked out of the Bay every day. This will impact fishing in Corpus Christi Bay, and also cause odors from decaying organisms near Portland.
- **Discharge Salinity**: Desal will also fish and other aquatic life on discharge when millions of gallons of salty brine are put back into the bay each day after the freshwater is sucked out. Increased salinity and lower oxygen levels will destroy fishing throughout Corpus Christi Bay.
- **Shallow Low-Turnover Bay System**: Acccording to scientists from our state universities and agencies, intake and discharge from desal plants should ONLY occur offshore in the Gulf – not inside our sensitive bay systems. The Port is only pushing for baywater desal to save money for industries, while sacrificing our waters. They're eager to build oil pipelines that run through our cities and countryside – why not build pipelines for transporting industrial water on- and off-shore instead of doing it in our shallow Bay?
- **Costs**: The Port plans to get the permit, in its name, so it can qualify for low-interest public loans through the State's Water Board – without identifying the industries that will actual use the water. Why aren't they telling us who they plan to bring here? Why aren't industries paying for the plant? Will taxpayers also be paying to operate it? How much is that going to cost?
- **Electric Grid**: Having more high-energy using industries here will cause more pollution and more stress on our energy grid, which couldn't even take care of Texans during last February's cold snap and energy outage. Industries that need huge amounts of freshwater for cooling shouldn't locate in Texas where it's hot and dry in the first place!
- **Waste Water**: Salty brine discharge would mix in with other waste water from the industries in La Quinta Channel and create a toxic environment that would kill fish and the life of the bay.

- **Health**: Those who use the bay for fishing or recreation would likely suffer health consequences from the chemicals used in the desalination process, including pre-treatment and from potential allergies to the dust from sludge trucks.
- **Commercial Fishing & Shrimping**: For those who fish or shrimp commercially, they will lose their source of income if aquatic life in La Quinta Channel and Corpus Christi Bay were destroyed by this desal plant.
- **Theft**: Attempting to diverting public water from Corpus Christi Bay (which connects to the Gulf of Mexico) to support private industry amounts to planning to steal from taxpayers – both in the state of Texas and the nation.
- **Temperature**: Since Texas is already drought-prone and gets very hot, the Port of Corpus Christi is irrational to wish to draw such high-energy-enticing industries to come here in the first place and must be refused.
- **Industrial Use**: The purpose of baywater desal is for industry – not for the people. The Port needs to show availability of huge amounts of water in order to entice more petrochemical industries here, like Exxon-SABIC. Such plants require huge amounts of water for cooling and they use a lot of energy.

Climate Crisis: National Security Threat

This desalination project is a threat to the community and planet because it would directly increase global warming emissions and would support additional increases of emissions by the corporations' projects that want the water. Producing and using the energy required for the desalination process would exacerbate our present grave climate crisis as would operating the proposed and existing industrial facilities for which the Port wants this water. That is why we must look at critical concerns about climate change.

As we know from the present **heat wave and fires** in the western United States, as we can remember from the devastation of **deaths and damage** from the 2021 winter storm in Texas, as we know from the **heavy damage from flooding in Hurricane Harvey** August 17, 2017 – September 2, 2017, and as we know from the drought of 2011 when **301 million trees died** in Texas and emptied lake reservoirs of drinking water, as we know from the current **food security threat** both from agricultural failures in the nation's growing counties and from lack of fuel to transport food following climate change events **-- climate change is a very real and present danger to which Texans and people around the world are shifting, responding, and planning differently from business as usual.**

In 2015, **Joint Chiefs of Staff of the combined US Military forces named global warming/climate change as a serious national security threat.**

There is a chronology of at least 75 repeated concerns from various branches of the Department of Defense and the US Intelligence Agencies dating back from the 1990: **Global Climate Change Implications for the United States**: from the U.S. Navy War College.

In the recent summer 2021 issuance of the **US Army Corps of Engineers Budget document**, the Corps warns against infrastructure projects such as those currently threatening in the Coastal Bend area including this desalination proposal in question. USACE names **three key objectives**:

1) increasing infrastructure and ecosystem resilience to climate change and **decreasing climate risk for communities based on the best available science**;

2) **promoting environmental justice** in disadvantaged communities in line with Justice40 and creating good paying jobs that provide the chance to join a union; and

3) **not funding work that directly subsidizes fossil fuels** including work that lowers the cost of production, lowers the cost of consumption, or raises the revenues retained by producers of fossil fuels.

Permitting this desalination proposal would support the fossil fuel industry, worsen the climate crisis, and contradict top US military findings around protecting US national security from climate change threats.

Rapid Economic Transition at Present
The TCEQ must get with the economic program and not permit what would be an outdated and damaging facility. A fast-growing number, **$14.58 Trillion dollars** have recently been divested from fossil fuels corporations by over 1,327 institutions and more than $5.2 Billion has been divested from fossil fuels by over 58,000 individuals.

The fossil fuel industry for which this desal plant is wanted is fast declining because of significant and rational concerns about the climate crisis.

Investors such as the Rockefeller Brothers Fund are finding that their **portfolios are performing significantly better since divestment from fossil fuels**. Their report issued in 2015, cites "recent moves by financial powerhouses like BlackRock and Goldman Sachs as further evidence that fossil fuel stocks are increasingly seen as poor investments."

The Rockefellers initially divested from oil and gas because of concerns about climate change then found they made money getting out of the fuels of the past. "The Rockefeller Brothers Fund investment portfolio is now 99 percent fossil fuel free. Coal and tar sands account for less than 0.1 percent of its $1.1 billion portfolio; oil and gas comprise another 0.9 percent and falling. Since announcing its commitment to divest, the RBF has also committed 15 percent of its endowment to market-rate impact investments in renewable energy, sustainable agriculture, microfinance, workforce development, and more."

"Oil is obviously a definitional part of my family's past," said Valerie Rockefeller, great-great-granddaughter of John D. Rockefeller and chair of the RBF board of trustees. Rockefeller. "But it has no place in our future."

Conclusion Appeal and Request for Contested Case Hearing

I join the many commenters at the Public Meeting on July 13, 2021 in opposing WR 13630 and requesting a contested case hearing.

Stopping this desalination project by denying WR 13630 will not only protect the people, wildlife and Corpus Christi bay life, it will help reduce climate threats and promote the much-needed just transition and recovery from fossil fuels to good paying jobs and a healthy future for all.

Deny WR 13630.

You have the power to do the right thing.

If you have any questions about my comments, please feel free to contact me at donnaleehoffman@gmail.com or 512-299-5776.

Thank you.

Donna Hoffman

Melissa Schmidt

From: PUBCOMMENT-OCC
Sent: Wednesday, July 14, 2021 8:30 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

From: donnaleehoffman@gmail.com <donnaleehoffman@gmail.com>
Sent: Tuesday, July 13, 2021 10:24 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER: 2021-0421-WR

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Donna L Hoffman

E-MAIL: donnaleehoffman@gmail.com

COMPANY: Coalition Against Pipelines

ADDRESS: 1500 GREGORY ST N/A
AUSTIN TX 78702-2732

PHONE: 5122995776

FAX:

COMMENTS: Exhibit from previous comment: https://climateandsecurity.org/2017/01/chronology-of-the-u-s-military-and-intelligence-communitys-concern-about-climate-change/

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Thursday, March 25, 2021 9:27 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: prokitesurf@gmail.com <prokitesurf@gmail.com>
Sent: Thursday, March 25, 2021 7:21 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Jeff Howard

E-MAIL: prokitesurf@gmail.com

COMPANY:

ADDRESS: 307 WILDCAT DR
PORTLAND TX 78374-1437

PHONE: 3615106166

FAX:

COMMENTS: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel I request a two-week extension of the deadline for comments on account of the recent freeze and loss of electricity in Texas. I request that a public meeting be held for the community to express its concerns. request that a

Contested Case Hearing be held According to the permit, the Port of Corpus Christi would be allowed to intake 62,890 gallons of water from La Quinta Channel every minute. Intaking that amount of water that fast will require an enormous amount of suction power and I am concerned about aquatic life being trapped or killed in the process. This intake pipe is a death sentence! I and my family members love to fish/boat/swim/etc. along the Portland Shoreline where the intake pipe for the Port of Corpus Christi's desalination facility will be located or in Ingleside Cove where the discharge will flow to. I am concerned that given the number of small larvae which will be sucked up, turned to sludge, and deposited into landfills, fishing will be badly impaired in the region. I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish – or for people! If the fish die, then the birds we love to watch will also die or leave the area. I am concerned about possible health effects on me or my family from the chemicals used in the desalination process, including pre-treatment. I fish for business and I am concerned about loss of income that will happen when aquatic life in La Quinta Channel and Corpus Christi Bay is harmed/destroyed by this desal plant. Many of us suffered through the historic winter storm in February 2021 and were without power for several days in freezing temperatures due to the amount of demand placed on the electrical grid in Texas. The operating pumps required to suck 62,890 gallons of water per minute will take an enormous amount of power, placing even more strain on the grid. I am opposed to issuing a permit which would demand excessive amounts of energy to supply water only for industrial use. Most of the desalinated water will be used by industry for cooling purposes. Aren't there federal regulations that apply to industrial cooling water intake structures? Since Corpus Christi Bay connects to the Gulf of Mexico, doesn't diverting water from Corpus Christi Bay to support private industry without federal oversight amount to stealing from the Waters of the United States (WOTUS)? Since Texas is already drought-prone and gets very hot, why is the Port of Corpus Christi enticing such thirsty high-energy-requiring industries to come here in the first place? Shouldn't they go where it's cooler and where there's more water? Since this desal plant has been listed as a "recommended water strategy" on the Region N Water Plan for 2021, I expect that the Port of Corpus Christi will try to get a low-interest loan from the Texas Water Development Board (TWDB) to construct the plant. Isn't it a violation of Texas law to use public funds to support private industry? Who will have to pay back such a loan? All of our area scientists, including from Texas Parks & Wildlife, the General Land Office, the UT Marine Science Institute, and the Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. There's even an expedited permitting process for this. Why is the Port of Corpus Christi, a public entity, insisting on putting intake and discharge inside Corpus Christi Bay in the first place. Aren't they listening? Why aren't they showing the way by pursuing the expedited permit process that will keep our Bay safer? Why is the Port applying for this permit? Shouldn't it be the private industries that plan to use the desalinated water? Why aren't industries paying to construct this plant? Why aren't industries paying for pipelines to bring in water from offshore and pump the brine back offshore? After all, they pay for other pipelines that cross San Patricio County, tearing up communities and farm land. The Port has proven and shown they have no care or respect for the environment and there is no end to their greed for the soul purpose of making more money. Our closed bay ecosystem can not handle this type over use and will destroy the Unknown future of our bays. Please do not allow the greed to when over the future of our bays. I

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Thursday, March 25, 2021 8:48 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: prokitesurf@gmail.com <prokitesurf@gmail.com>
Sent: Wednesday, March 24, 2021 9:19 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Jeff Howard

E-MAIL: prokitesurf@gmail.com

COMPANY:

ADDRESS: 307 WILDCAT DR
PORTLAND TX 78374-1437

PHONE: 3615106166

FAX:

COMMENTS: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel I request a two-week extension of the deadline for comments on account of the recent freeze and loss of electricity in Texas. I request that a public meeting be held for the community to express its concerns. request that a

Contested Case Hearing be held According to the permit, the Port of Corpus Christi would be allowed to intake 62,890 gallons of water from La Quinta Channel every minute. Intaking that amount of water that fast will require an enormous amount of suction power and I am concerned about aquatic life being trapped or killed in the process. This intake pipe is a death sentence! I and my family members love to fish/boat/swim/etc. along the Portland Shoreline where the intake pipe for the Port of Corpus Christi's desalination facility will be located or in Ingleside Cove where the discharge will flow to. I am concerned that given the number of small larvae which will be sucked up, turned to sludge, and deposited into landfills, fishing will be badly impaired in the region. I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish – or for people! If the fish die, then the birds we love to watch will also die or leave the area. I am concerned about possible health effects on me or my family from the chemicals used in the desalination process, including pre-treatment. I fish for business and I am concerned about loss of income that will happen when aquatic life in La Quinta Channel and Corpus Christi Bay is harmed/destroyed by this desal plant. Many of us suffered through the historic winter storm in February 2021 and were without power for several days in freezing temperatures due to the amount of demand placed on the electrical grid in Texas. The operating pumps required to suck 62,890 gallons of water per minute will take an enormous amount of power, placing even more strain on the grid. I am opposed to issuing a permit which would demand excessive amounts of energy to supply water only for industrial use. Most of the desalinated water will be used by industry for cooling purposes. Aren't there federal regulations that apply to industrial cooling water intake structures? Since Corpus Christi Bay connects to the Gulf of Mexico, doesn't diverting water from Corpus Christi Bay to support private industry without federal oversight amount to stealing from the Waters of the United States (WOTUS)? Since Texas is already drought-prone and gets very hot, why is the Port of Corpus Christi enticing such thirsty high-energy-requiring industries to come here in the first place? Shouldn't they go where it's cooler and where there's more water? Since this desal plant has been listed as a "recommended water strategy" on the Region N Water Plan for 2021, I expect that the Port of Corpus Christi will try to get a low-interest loan from the Texas Water Development Board (TWDB) to construct the plant. Isn't it a violation of Texas law to use public funds to support private industry? Who will have to pay back such a loan? All of our area scientists, including from Texas Parks & Wildlife, the General Land Office, the UT Marine Science Institute, and the Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. There's even an expedited permitting process for this. Why is the Port of Corpus Christi, a public entity, insisting on putting intake and discharge inside Corpus Christi Bay in the first place. Aren't they listening? Why aren't they showing the way by pursuing the expedited permit process that will keep our Bay safer? Why is the Port applying for this permit? Shouldn't it be the private industries that plan to use the desalinated water? Why aren't industries paying to construct this plant? Why aren't industries paying for pipelines to bring in water from offshore and pump the brine back offshore? After all, they pay for other pipelines that cross San Patricio County, tearing up communities and farm land. The Port has proven and shown they have no care or respect for the environment and there is no end to their greed for the soul purpose of making more money. Our closed bay ecosystem can not handle this type over use and will destroy the Unknown future of our bays. Please do not allow the greed to when over the future of our bays. I

Melissa Schmidt

From: PUBCOMMENT-OCC
Sent: Wednesday, July 14, 2021 8:54 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

H

From: hughesemailwendy@yahoo.com <hughesemailwendy@yahoo.com>
Sent: Tuesday, July 13, 2021 7:18 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER: 2021-0421-WR

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Wendy Hughes

E-MAIL: hughesemailwendy@yahoo.com

COMPANY:

ADDRESS: 2129 BAY BREEZE
PORTLAND TX 78374-4156

PHONE: 3617040038

FAX:

COMMENTS: I live either within 1 or 2 miles from this proposed facility. I am against this permit and am requesting a contested case hearing. This will severely affect aquatic life when it discharges millions of gallons salt brine on a daily basis while sucking out the fresh water. This will lower the oxygen levels which can't be good for the environment. Those who use the bay for fishing or recreation may suffer health consequences from the chemicals used in the desalination

process, including pre-treatment That's me and my family. Why would you even consider such a shallow sensitive bay? The Port is only pushing for bay water desal to save money for industries, while sacrificing our waters. They're eager to build oil pipelines that run through our cities and countryside – why not build pipelines for transporting industrial water on- and off-shore instead of doing it in our shallow Bay? he purpose of bay water desal is for industry – not for the people. The Port needs to show availability of huge amounts of water in order to entice more petrochemical industries here, like Exxon-SABIC. Such plants require huge amounts of water for cooling and they use a lot of energy. Allowing this permit would severely affect my town and enjoyment of our bays. The following is directly from the Harte Research Institute "Intake issues are similar to those of power plants, etc. and are documented in many studies, and mitigation measures are well known. Two factors that have the most impact are impingement and entrainment1. Impingement of larger fish, marine mammals, and sea turtles can reduce the spawning stock biomass due to an increased mortality rate. In addition, entrainment of smaller invertebrate and fish larvae as well as eggs can reduce recruitment. There is robust scientific literature for ways to address and mitigate these concerns, but location of intakes (and discharge) is a key factor, and there are locations that cannot be mitigated." There have not been enough studies to know the long term affects on our bay. This isn't open ocean area, it's a sensitive bay are with a sensitive ecosystem. I strongly oppose all desalination plants in Corpus Christi Bay.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Friday, June 5, 2020 2:11 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM

From: hughesemailwendy@yahoo.com <hughesemailwendy@yahoo.com>
Sent: Friday, June 5, 2020 2:06 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Wendy Hughes

E-MAIL: hughesemailwendy@yahoo.com

COMPANY:

ADDRESS: 2129 BAY BREEZE
PORTLAND TX 78374-4156

PHONE: 3617040038

FAX:

COMMENTS: I AM OPPOSED TO THIS AND WOULD LIKE A PUBLIC MEETING ON IT. MOST RESIDENTS ARROUND HERE DON'T EVEN KNOW THIS IS IN THE PLANNING AND THEY HAVE A RIGHT TO KNOW. AQUATIC LIFE WILL HAVE MANY OPPORTUNITIES TO GET TRAPPED IN PIPES AND SCREENS. THE INTAKE AREA IS NEAR INDUSTRIAL WASTE DISCHARGE THAT ARE ALREADY LOCATED THERE AND OTHERS THAT PLAN TO BE THERE.

Melissa Schmidt

From: PUBCOMMENT-OCC
Sent: Wednesday, July 14, 2021 8:53 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

H

From: jeffrey@texasenvironment.org <jeffrey@texasenvironment.org>
Sent: Tuesday, July 13, 2021 7:37 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER: 2021-0421-WR

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Jeffrey Douglas Jacoby

E-MAIL: jeffrey@texasenvironment.org

COMPANY: Texas Campaign for the Environment

ADDRESS: 1301 CHICON ST Unit 202
AUSTIN TX 78702-2151

PHONE: 5125024718

FAX:

COMMENTS: On behalf of Texas Campaign for the Environment and its members who are affected parties, I formally request a contested case hearing on this permit application.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 29, 2021 2:13 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

H

From: tacosupreme1120@gmail.com <tacosupreme1120@gmail.com>
Sent: Sunday, March 28, 2021 7:23 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Max Paul Keller

E-MAIL: tacosupreme1120@gmail.com

COMPANY:

ADDRESS: 10801 SILVERTON DR
CORPUS CHRISTI TX 78410-2233

PHONE: 3615871028

FAX:

COMMENTS: My name is Max Keller; I am a student, and I live at 10801 Silverton Dr. Corpus Christi, Texas 50% of the time. I spend the other 50% of my time at 105 Lost Creek Dr. Portland, Texas. I STRONGLY OPPOSE the port of Corpus Christi placing an intake pipe for the desal plant in the La Quinta channel. I ALSO STONGLY OPPOSE the POCCA desal intake permit. Not only I, but a huge amount of people fish the locations that the city of Corpus Christi wants to place

these intake pipes for desal plants. I am concerned about the amount of salty brine and sludge that the desal plants will put back into the bays and the La Quinta channel. By doing this, it will kill the environment and make it inhospitable for the aquatic wildlife. It is a fact that I am not the only one who boats, fishes, and swims in these waters. I grew up swimming and fishing these waters and the bays mean a lot to me, and the rest of the Corpus Christi, Portland, and Ingleside population. I also request a public hearing, so that the public can be informed, along with a two-week extension of the deadline for comments.

Melissa Schmidt

From: PUBCOMMENT-OCC
Sent: Tuesday, July 13, 2021 2:35 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

H

From: uneedalaitinen@gmail.com <uneedalaitinen@gmail.com>
Sent: Tuesday, July 13, 2021 1:50 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER: 2021-0421-WR

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: MRS Uneeda Laitinen

E-MAIL: uneedalaitinen@gmail.com

COMPANY:

ADDRESS: 102 MARKHAM PL
PORTLAND TX 78374-1418

PHONE: 3618773523

FAX:

COMMENTS: My name is Uneeda Laitinen. I reside at 102 Markham Place, Portland, Texas 78374. My phone number is 361-877-3523. I live within one mile of the proposed desalinization intake. I am a member of Ingleside on the Bay Coastal Watch Association. I STRONGLY OPPOSE the Port of Corpus Christi Authority (POCCA)application for intake permit #13630 for a desalination plant in La Quinta Channel. I STRONGLY OPPOSE the Port of Corpus Christi Authority

placing an intake pipe in La Quinta Channel for this proposed desalination plant. I request a Contested Case Hearing be held on this permit application. I request an environmental impact study be done to assess the consequences of desalination on the aquatic flora and fauna, and human exposure to the toxic chemicals utilized by the desalination process. Many will speak to technical issues regarding processes and detriments to the environment. I am a private citizen, a woman, a wife, a mother, a grandmother, a senior citizen, a taxpayer, and a Texan. I can tell you what it will means to me as a citizen of the Coastal Bend and resident of the immediate area in question. The entire community of the Coastal Bend will be negatively affected if this permit is granted. We will all be losers in this fiasco perpetrated upon the Coastal Bend by a few wishing to profit from the degradation of the very life blood of the Coastal Bend our estuary bay system. Texans know water is the key for many industries. The POCCA will further its goals to the detriment of our Bay, aquatic life and all the citizens who depend on it. The intake will suck sea life into screens which will kill fish fry, larva, and plankton, thereby destroying the food chain of the Bay. All will die to be carted off as sludge to a landfill. This will kill our bay estuary system. Our birds will leave or die because their food source will be gone. We will not spend leisurely afternoons fishing and enjoying the abundance of nature. Tourism will cease. Jobs will be lost. All forms of tourism generate 2.6 million jobs in the Gulf Coast states, nearly five times the number of jobs provided by the region's other three largest resource-based industries: commercial fishing, oil and gas, and shipping. Wildlife tourism along the Gulf Coast supports more than $19 billion in spending and generates more than $5 billion in federal, state, and local tax each year. According to the National Oceanographic and Atmospheric Administration, commercial and recreational fishing in the five Gulf states produced $31.89 billion in revenue in 2017. In 2015, commercial fishing created 146,004 jobs and recreational fishing created 107,549 jobs in the Gulf Coast states, for a total of 253,553 full-time equivalents. These jobs tend to be distributed among a diverse workforce. The charge to industrialize the northeast side of Corpus Christi Bay is led by the POCCA. The responsibilities of the POCCA are break bulk cargo, project cargo, oil and gas, general cargo and dry bulk, liquid bulk, agricultural cargo, refrigerated cargo, and containerized cargo, among other commodities. The POCCA is responsible for maintaining intercoastal waterways, cargo docks, open storage and warehouse and maintaining the shipping channels. The environmental policy, as stated on the POCCA website is: "The PCCA Commissioners recently approved a revised environmental policy which identified five key precepts that will be considered when evaluating new developments and operations. The five key precepts include air quality, water quality, soils and sediments, wildlife habitat, and environmental sustainability. PCCA environmental stewardship efforts focus on improvements and proactive measures related to these precepts." The POCCA has never been charged with constructing, managing, operating and/or maintaining a desalination plant. POCCA does not have the authority, expertise, or the mandate for such an application or operation. What we are faced with here is the POCCA wanting to garner permits to use as an incentive for businesses to locate in the Coastal Bend. This will result in a permit process which is no more than industrial swag for dirty industries. The entity which proposes to build, manage, operate, and maintain a desalination plant would be the proper applicant of this permit not the POCCA. This permit application meets the very definition of a BOONDGGLE, in that this project is a waste of both time and money yet is continued due to extraneous policy or political motivations. Therefore, I ask TCEQ to deny permit #13630 on the grounds that: 1. Desal is a death trap for aquatic life. 2. Desal will kill fishing and tourism in Corpus Christi Bay. 3. POCCA has overstepped its authority and guidelines. 4. POCCA is premature in its application. 5. POCCA has no plans to build, maintain, or operate the proposed facility. 6. POCCA has not adhered to its own mandate regarding its responsibilities for environmental stewardship of the Bay of Corpus Christi. 7. POCCA will in effect remove TCEQ authority over the facility by being the de facto granting agency for the permit. 8. POCCA does not have standing to act in leu of or instead of the TCEQ. Thank you for your time and attention. I look forward to your decision. Bless your hearts!

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 29, 2021 2:45 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: uneedalaitinen@gmail.com <uneedalaitinen@gmail.com>
Sent: Sunday, March 28, 2021 1:18 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: MRS Uneeda Laitinen

E-MAIL: uneedalaitinen@gmail.com

COMPANY:

ADDRESS: 102 MARKHAM PL
PORTLAND TX 78374-1418

PHONE: 3618773523

FAX:

COMMENTS: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel I request a two-week extension of the deadline for comments because of the recent freeze and loss of

electricity in Texas. I request that a public meeting be held for the community to express its concerns. I request that a Contested Case Hearing be held.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 8, 2021 1:42 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: uneedalaitinen@gmail.com <uneedalaitinen@gmail.com>
Sent: Friday, March 5, 2021 9:58 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: MRS Uneeda Laitinen

E-MAIL: uneedalaitinen@gmail.com

COMPANY:

ADDRESS: 102 MARKHAM PL
PORTLAND TX 78374-1418

PHONE: 3618773523

FAX:

COMMENTS: My name is Uneeda Laitinen. My husband, Dan and I reside at 102 Markham Place, Portland, Texas 78374. My phone number is 361-877-3523. Our home is near the intake proposed by permit WRPERM 13630. I am a member of Ingleside on the Bay Coastal Watch Association. I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe

for a desalination plant in La Quinta Channel I request a two-week extension of the deadline for comments due to the recent freeze and loss of electricity in Texas. I request that a public meeting be held for the community to express its concerns. I request that a Contested Case Hearing be held. Dan and I moved to Portland prior to his retirement. We settled in Portland for the community spirit, slower pace, and the fishing! We own a boat, however many mornings I rise to find a note on the kitchen table, "Gone Fishing". Dan enjoys "walking in the water" as he terms it. Often, he practices catch and release for the sheer pleasure of feeling that tug on the line every fisherman patiently waits for. When he comes home, he has a smile on his face and a tale involving the catch of the day! All in all, a happy man at peace with his world. That will end if this permit is approved. There will be nothing left to catch after the voracious intake of 62,778 gallons a minute has sucked all the small larvae out of La Quinta Channel. There will be no fish, crabs, or shrimp. Our thriving ecosystem will be sludge, deposited as industrial waste in a landfill. Ecologically La Quinta Channel will be a waste land. We have learned our Texas energy grid is lacking to say the least. The massive failure of the Texas electrical grid resulted in the loss of too many Texan lives in February 2021. The pumps utilized by this plant will require enormous amounts of additional energy. How can any responsible person recommend additional demands and stress be placed on the power grid? Is TCEQ ready to accept responsibility for the loss of additional lives due to grid failure just to have a plant which will provide water for industry? Do not delude yourselves, this plant is for industry not drinking water for Texas families. As a citizen of Texas, the Coastal Bend, and Portland I am adamantly opposed to the issuance of this permit. Thank you for your time, Uneeda Laitinen

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Thursday, March 25, 2021 5:16 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: charlawrence1944@gmail.com <charlawrence1944@gmail.com>
Sent: Thursday, March 25, 2021 2:42 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Charlotte Lawrence

E-MAIL: charlawrence1944@gmail.com

COMPANY:

ADDRESS: PO BOX 535
INGLESIDE TX 78362-0535

PHONE: 3613329042

FAX:

COMMENTS: My name is Charlotte Lawrence. I live 440 Woodhaven in Ingleside on the Bay. I oppose the POCCA Desal Intake Permit WRPERM 13630. I fear for the impact it will have on the water quality so near our homes. Thus, I request a

public meeting and a contested case hearing. I also request a two week extension on public comments on account of the Texas freeze. Thank you.

Melissa Schmidt

From: PUBCOMMENT-OCC
Sent: Wednesday, July 14, 2021 8:35 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

H

From: gogreen@austin.rr.com <gogreen@austin.rr.com>
Sent: Tuesday, July 13, 2021 9:02 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER: 2021-0421-WR

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: MS Susan Lippman

E-MAIL: gogreen@austin.rr.com

COMPANY:

ADDRESS: 8901 CHISHOLM LN
AUSTIN TX 78748-6381

PHONE: 5122919838

FAX:

COMMENTS: I am a resident of Texas, in Austin, and a visitor to many places in Texas, including coastal areas. I lived part of my childhood near an unspoiled stretch of Padre Island and Matagorda Bay which we visited weekly. I often return to the coastal areas and thus I am part of the tourist economy and nature tourism economy of our Texas coasts. I also am a consumer of seafood of which a good portion undoubtedly comes from our own Texas coast. I oppose the Permit for the

proposed desalinization facility at the Port of Corpus Christi, Intake Permit #wrpwerm 13630, and ask that a contested case hearing be established. I am concerned that the ecosystem of the Bay will be significantly damaged by the great volume of water intake through the large intake pipes. Despite a quarter-inch mesh, the process would destroy great amounts of small aquatic life and algae which form the bottom of the food chain, and also certain forms of immature organisms which must exist in great numbers to support the continuance of adult populations. Ecosystems are well known to be complexly interconnected. Although the permit is only for the intake process, the proposed facility is also inextricably interconnected, so both the intake and the discharge are impacts and both will impact the health of the life in the Bay. If you consider only various parts of the proposed facility separately, you ignore the cumulative, total load of stresses on the natural systems. The huge quantity of salty discharge will raise the salinity levels, lower the oxygen levels, and harm or destroy the fish, the ecosystem, the fishing economy and tourist fishing. As a consumer of fish and a part of the visitors' economy, the permit should be rejected. Experts and scientists take the position that both intake and discharge from these plants should be done only well offshore in the Gulf, and not in the near-shore waters where the impact on aquatic life is greatest. The TCEQ should not approve the most cost-cutting, damaging plans proposed by the applicant. In addition, Texas is a hot climate, and subject to periods of extended drought. Our bays and estuaries are already generally stressed by reduced amounts of fresh water from rivers entering the estuary areas, as there is much demand from cities and agricultural interests upstream. It is very possible, and with continued stresses it becomes inevitable for ecosystems to collapse. It is the duty of the Texas Commission on Environmental Quality to deny permits that individually or in the aggregate make it impossible for valuable coastal ecosystems to survive and be healthy. The well being of Texans along the coastlines and all over Texas need you to see this permit as part of the whole area that needs you to make the responsible decision, and deny this permit.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 29, 2021 2:31 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: mack3811@gmail.com <mack3811@gmail.com>
Sent: Sunday, March 28, 2021 7:49 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Thomas Mack

E-MAIL: mack3811@gmail.com

COMPANY:

ADDRESS: 218 BAYSHORE DR
INGLESIDE TX 78362-4717

PHONE: 3615499765

FAX:

COMMENTS: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel I request a two-week extension of the deadline for comments on account of the recent freeze and loss of electricity in Texas. I request that a public meeting be held for the community to express its concerns. I request that a

Contested Case Hearing be heldAccording to the permit, the Port of Corpus Christi would be allowed to suck 62,890 gallons of water from La Quinta Channel every minute. Sucking in that amount of water that fast will require an enormous amount of suction power and I am concerned about aquatic life being trapped or killed in the process. This intake pipe is a death sentence! I and my family members love to fish/boat/swim/etc. along the Portland Shoreline where the intake pipe for the Port of Corpus Christi's desalination facility will be located or in Ingleside Cove where the discharge will flow to. I am concerned that given the number of small larvae which will be sucked up, turned to sludge, and deposited into landfills, fishing will be badly impaired in the region. I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish - or for people! If the fish die, then the birds we love to watch will also die or leave the area. I am concerned about possible health effects on me or my family from the chemicals used in the desalination process, including pre-treatment. Many of us suffered through the historic winter storm in February 2021 and were without power for several days in freezing temperatures due to the amount of demand placed on the electrical grid in Texas. The operating pumps required to suck 62,890 gallons of water per minute will take an enormous amount of power, placing even more strain on the grid. I am opposed to issuing a permit which would demand excessive amounts of energy to supply water only for industrial use. Most of the desalinated water will be used by industry for cooling purposes. Aren't there federal regulations that apply to industrial cooling water intake structures? Since Corpus Christi Bay connects to the Gulf of Mexico, doesn't diverting water from Corpus Christi Bay to support private industry without federal oversight amount to stealing from the Waters of the United States (WOTUS)? Since Texas is already drought-prone and gets very hot, why is the Port of Corpus Christi enticing such thirsty high-energy-requiring industries to come here in the first place? Shouldn't they go where it's cooler and where there's more water? Since this desal plant has been listed as a "recommended water strategy" on the Region N Water Plan for 2021, I expect that the Port of Corpus Christi will try to get a low-interest loan from the Texas Water Development Board (TWDB) to construct the plant. Isn't it a violation of Texas law to use public funds to support private industry? Who will have to pay back such a loan? All of our area scientists, including from Texas Parks & Wildlife, the General Land Office, the UT Marine Science Institute, and the Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. There's even an expedited permitting process for this. Why is the Port of Corpus Christi, a public entity, insisting on putting intake and discharge inside Corpus Christi Bay in the first place. Aren't they listening? Why aren't they showing the way by pursuing the expedited permit process that will keep our Bay safer? Why is the Port applying for this permit? Shouldn't it be the private industries that plan to use the desalinated water? Why aren't industries paying to construct this plant? Why aren't industries paying for pipelines to bring in water from offshore and pump the brine back offshore? After all, they pay for other pipelines that cross San Patricio County, tearing up communities and farm land.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 30, 2021 9:06 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630
Attachments: Comments by Kathryn Masten on WRPERM 13630.docx

PM
H

From: kathrynmasten@yahoo.com <kathrynmasten@yahoo.com>
Sent: Monday, March 29, 2021 2:08 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: DR. Kathryn Masten

E-MAIL: kathrynmasten@yahoo.com

COMPANY:

ADDRESS: 1006 SANDPIPER
INGLESIDE TX 78362-4689

PHONE: 4695002373

FAX:

COMMENTS: Please see attached.

Comments by Kathryn Masten on Port of Corpus Christi Water Rights Permit #13630

March 29, 2021

Introduction and Request: I serve as the Executive Director of the nonprofit Ingleside on the Bay Coastal Watch Association (iobcwa.org) and own a home in Ingleside on the Bay (IOB), an incorporated city of about 700 people in San Patricio County that is located directly on La Quinta Channel. I request that the TCEQ deny the Port of Corpus Christi's (POCCA) application for water rights permit 13630, request a public meeting followed by 2 more weeks of public comments, and request a contested case hearing.

San Patricio County "Land Grab": On March 23, 2021, at its second special meeting that month, the Port of Corpus Christi Commissioners voted for a resolution opposing HB 4137 / SB 1641 to give San Patricio County a second seat on the Port's seven-member Commission. In a 4-minute prepared speech, Wes Hoskins, San Patricio County's sole appointee on the Port Commission levied a series of concerns about recent actions by POCCA. He acknowledged that POCCA is engaging in a "land grab" – acquiring large swaths of San Patricio County land, taking it off the tax rolls for industrial development, and then using profits POCCA receives from these same industries to lobby AGAINST proposed legislation authorizing San Patricio County to have another seat on the Port Commission (HB 4137 / SB 1641). Mr. Hoskins specifically refers to desalination plants proposed by POCCA, including on La Quinta Channel and Harbor Island (recently recommended for denial by the SOAH and OPIC both), as "a bridge to nowhere", with no one to sell the desalinated water to.

Private Industry Profit NOT Public Interest of the People: The lack of a need for this huge volume of desalinated water is precisely the point. It is well-documented in the 2021 Region N Water Plan (which needs to be reflected in the application, since it still refers to an older plan) that projected population growth in the Coastal Bend does not justify desalination. Modest conservation efforts by citizens should be sufficient to address the needs of the people. Not to mention the hundreds of years of water available to be withdrawn from area aquifers – as presented to the Corpus Christi City Council on 9/29/20. No, the need for desalinated water is not for the public good – it is purely for private gain. As stated in POCCA's application, the purpose of the water is for industry. And not current industry – future industry. And not just any industry – thirsty, high-energy-using petrochemicals requiring millions of gallons of water each day for cooling (in our high temperature climate) that will release air pollutants and wastewater that will ruin Corpus Christi Bay.

Conflict with Texas Constitutional Purpose: As the Navigation District of Nueces County, POCCA was formed under Article XVI, Section 59 of the Texas Constitution. Presumably, San Patricio County was annexed by POCCA after a proposition was voted on in 2003. It is hard to understand how POCCA's constructing a desalination plant on POCCA-owned tax-exempt land to support the wasteful water needs of private industries aligns with the natural resources conservation, development, and preservation purposes identified in Article XVI, Section 59(a). The giant petrochemical Gulf Coast Gulf Ventures (Exxon-Sabic) and Steel Dynamics are two of POCCA's known "customers" for this desalinated water. How exactly is supporting the need for freshwater by an ethane cracker and steel mill "necessary or convenient to the operation or development of the district's ports and waterways" (Water Code Sec. 60.003)? What "essential public and governmental purposes" (Water Code Sec. 60.005) justify the Port's using tax-exempted land in San Patricio County for private industries that will degrade, if not completely ruin, the public waters and air of the Texas coast? Not to mention jeopardizing the health, safety, and quality of life of Ingleside on the Bay and other cities on Corpus Christi Bay?

Inappropriate Public Construction Financing: It is not clear from the application how the Port plans to pay for constructing this desal plant, but it would appear that 1) bonds require a vote and 2) loans to benefit private industry are not allowed. Article XVI, Section 59(c) of the Constitution states that "The Legislature shall not authorize the issuance of any bonds or provide for any indebtedness against any reclamation district unless such proposition shall first be submitted to the qualified voters of such district and the proposition adopted." Does the Port plan to put a desal plant bond issue up for a vote? Article XI, Sec. 3 of the Texas Constitution prohibits a municipal corporation from loaning its credit to a private corporation, but that's what the Port likely intends to do. While on the application POCCA checked "owner & operator", the Port has publicly stated that it intends to sell or give this permit to someone else (unnamed) to design, build, and operate the plant. However, the listing of the Port's La Quinta desal plant as a "recommended water management strategy" on the Region N Water Plan signals the Port intention to use its status as a public entity to seek public funding to pay for the plant's construction via a low-interest loan from the Texas Water Development Board (TWDB), like the City of Corpus Christi (the Coastal Bend's major water supplier) did. If POCCA gets a TWDB loan to construct this desal plant, who will pay the loan back? Who will pay for ongoing operations? Will it be the Port's industry "customers" – the ones that will actually USE the water generated from the plants? Nope. I suspect payment will fall on taxpayers. Shouldn't the Port's plans for financing design, construction, and operation be spelled out in the application?

Community Degradation due to Industry: In fact, it's likely BECAUSE of the kind of industries that the Port is enticing to come here as its customers that the population projections for San Patricio County in the Region N Water Plan are so low. The people are being squeezed out by industries in the battle over desirable waterfront property. With these kinds of industries occupying the coastline, who would want to (or could) live here? Like many, my husband and I couldn't wait to move to the beautiful Texas coast for retirement. Alas, we are seeing a dystopian landscape emerge that's looking (and smelling) more and more like "cancer alley" (Port Arthur, TX area) each day, with dredges churning, fires flaring, smoke billowing, and sirens wailing. The beautiful waters of Corpus Christi Bay should be protected for the benefit of all citizens and preserved for future generations – not exploited and ruined for short-term private gain. The Karankawa managed the Bay for millenia before we shared our diseases with them and stole their land - as evidenced by the numerous state archeological sites at undisclosed locations that dot the shores of Corpus Christi Bay, in land now mostly "owned" by industries.

Loss of Aquatic Life: All of the salinity models show that the turnover in Corpus Christi Bay – and especially in the nearly-closed La Quinta Channel – cannot handle baywater desalination without causing significant harm to aquatic life. An intake structure that is not designed properly will cause impingement and entrainment. In the draft permit, only "reasonable measures...to reduce impacts to aquatic resources due to entrainment or impingement" are required. This is simply not sufficient! The application contains no design plans for the intake structure in the application. Benthic populations, oysters and shellfish, fish, mammals, and birds will all be impacted in a violent death spiral. Such destruction of aquatic life in Corpus Christi Bay will decimate public waters and harm coastal communities like Ingleside on the Bay, Portland, North Beach, and Port Aransas. Constructing a desal plant on La Quinta Channel is NOT in the public interest.

Ignoring Offshore Option: In the 2018 "Marine seawater desalination diversion and discharge zones report" (https://tpwd.texas.gov/publications/pwdpubs/media/hb2031dz.pdf) ordered by the 84th Legislature, the Texas Parks and Wildlife Dept. and the General Land Office found that the safest desalination zones are located offshore and away from inlets to Texas bays and estuaries. Even though TCEQ set up an expedited permit process for desal plants that follow these recommendations, the Port

is doggedly insisting on constructing a desal plant within Corpus Christi Bay (both on La Quinta Channel and at Harbor Island) – putting the entire Coastal Bend at risk of losing its most precious resource – the living waters of this delicate ecosystem. TAMUCC's Harte Research Institute echoes findings from this report based on their own scientific studies, available at https://www.harte.org/news/harte-research-institute-statement-our-desalination-science. The ONLY reason why POCCA insists on placing the intake and discharge inside the bay is to save money for its private industry customers! These industries eagerly build pipelines across San Patricio County to transport oil. Why won't they pay to construct pipelines to protect our fish? Again, how does a desal plant for industry benefit the Texas taxpayer?

Failure to Consider Impacts of Multiple Proposed Desal Plants: The Region N Water Plan includes three (3) desal plants on La Quinta as "recommended water management strategies" – despite many of us providing both written and verbal timely comments expressing our concerns. Several public entities are competing over these plants, but the San Patricio County cities of Ingleside on the Bay and Portland will be most affected – and the least voice. This past November, there was a significant turnover in elected officials in the City of Corpus Christi – including a new mayor. This new City Council and Mayor have been questioning why the Port is pursuing its own two desal plants (Harbor Island and La Quinta) while the City is pursuing two different ones (Inner Harbor and La Quinta). The City of Ingleside is also proposing a desal plant on La Quinta Channel with Poseidon Water as their partner. With this many entities seeking a desal plant on La Quinta, it is up to TCEQ to assess not only the merits of each, but also the cumulative impacts of multiple sources of water diversion due to 1) ALL three proposed desal plants on La Quinta Channel, and 2) ALL the desal plants proposed for Corpus Christi Bay. Failure to do a proper cumulative impact assessment WILL have catastrophic consequences for the Corpus Christi Bay system.

Imminent Danger from Cumulative Impacts of All POCCA Projects – especially Channel Deepening: TCEQ must consider the cumulative impacts of ALL the multiple projects proposed for the Corpus Christi Bay SYSTEM - not just the desalination plants in the bay itself. And especially for ALL of the projects spearheaded by the Port of Corpus Christi! Many of us submitted public comments submitted to the U.S. Army Corps of Engineers with regard to scoping POCCA's Corpus Christi Ship Channel Deepening project Environmental Impact Statement (EIS). At that time, we called for the need to assess cumulative impacts, including from desal. The impacts of millions of gallons of water being sucked out of the bay MUST be examined in conjunction with cuts made to the Corpus Christi and La Quinta Ship Channels to deepen, lengthen, and/or widen them. This is quite literally like adding salt to the wound! Historical research on channel deepening suggests that potentially severe impacts to communities may result both inland and along the coast, as described by Familkhalili and Talke (2016) in their paper entitled: "The effect of channel deepening on tides and storm surge: A case study of Wilmington, NC." In comments due on 7/3/20, we alerted USACE to the potential dangers of channel deepening on IOB. Just 3 weeks later, on 7/25/20, we in Ingleside on the Bay experienced first-hand the impacts from the recent and ongoing deepening of the Corpus Christi Ship Channel. IOB was deluged with a 4' storm surge from Hurricane Hannah (a category 1 hurricane), putting a quarter of our city under water – from the Ingleside Beach Club to Bahia Marina. This storm surge made Bayshore Drive, the only access point to many of our residents, inaccessible for several days. But it didn't stop there. We continued to experience storm surge up to the same level (4') with EVERY subsequent storm in the Gulf for the next two months! And there were about 8 of them. While our city has become accustomed to seasonal nuisance flooding from king tides, so far they've been just that – little nuisances. These surges are different – and they're already endangering people's lives. What will happen if we have another Category 4 hurricane? And what will happen to all the industries around us, with their oil, natural gas, brine, and other noxious materials? WHO IS LOOKING AT THIS?

Need Updated Report on Corpus Christi Bay System: The figure below, from a 1997 report on Corpus Christi Bay (Ward, 1997), depicts the interrelationships within the bay system. While the figure itself is whimsical, the science behind it is quite serious. Things that happen in one part of the system, impact other parts of the system. It would be well worth TCEQ's time to read this nearly 25-year old report. Table 6-5 on p. 254, for example, chronicles the history of physical changes to the Corpus Christi Bay system up through 1990. TCEQ has the records for all subsequent modifications to the channel, as well as data showing the impacts. We call on you to commission a report on cumulative impacts of at least desal and channel changes before this madness goes any further and communities like IOB are put in more peril.

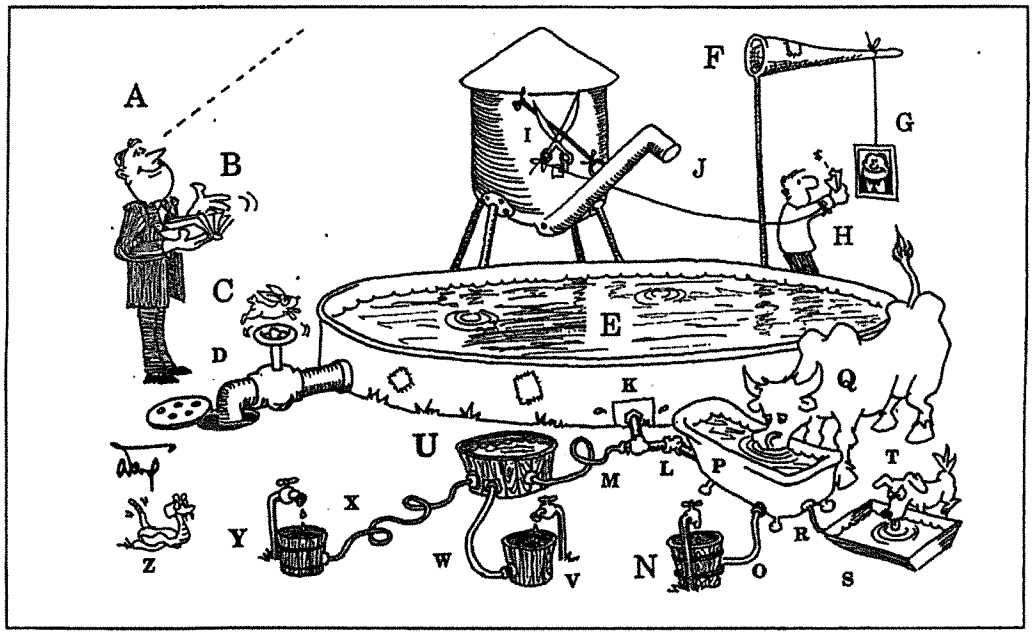


Figure 6-1. Conceptual model of hydraulics of Corpus Christi Bay system (with apologies to Rube Goldberg)

Elevation of moon inspires romantic (A) to wax rhapsodic, flipping pages of Byron's poetry (B). Rabbit (C) mistakes sound for bullets and runs frantically, opening valve (D) releases water into sewer and thereby lowering level of Gulf (E). Strong south wind blows windsock (F), raising into view photograph of Bill Clinton (G), to whom midget (H) tries to pay taxes, pulling scissors (I) to cut cord lowering downspout (J) to release water from tower, thereby raising water in Gulf (E). Water level variations are communicated through Aransas Pass inlet (K) into Corpus Christi Bay (P) through Turtle Cove channel (L) and into Aransas Bay (U) through Lydia Ann Channel (M). Water also enters Corpus Christi Bay (P) from Nueces Bay (N) through Nueces Entrance (O), and is lost to surface flux (Q). Water level variations pass through Bulkhead Flats and Causeway (R) into Upper Laguna (S), which also loses water to surface flux (T). Aransas Bay (U) communicates with Copano Bay (V) through Copano Pass (W) and through Ayres/Carlos Bay (X) with San Antonio Bay (Y), which is beyond scope of present study. Rattlesnake (Z) is also beyond scope of present study.

Lessons Learned from the Deep Freeze of 2021: Concern about the Texas government's ability to keep citizens safe was brought into question during the Texas Deep Freeze of February 2021. IOB was without running water and electricity for nearly 2 days. My husband and I slept in our car, which happens to be a hybrid capable of running without fuel for several days. Others were not so fortunate – including a friend of mine who also graduated from the University of North Texas with her Ph.D. She was found dead in her San Antonio apartment after not coming to work. It is critical that TCEQ consider the ability of Texas to handle increased load on the electrical grid that is likely to come if desalinated water becomes readily available for industrial use along the Texas coast. It was quite disturbing to look across Corpus Christi Bay from IOB during the freeze and see complete darkness on the Corpus Christi skyline – except for 9 large flares from industry and industrial lighting surrounding them. Hopefully the state is looking into how decisions were made about who got to keep the lights on – and that better decisions to preserve human life are made next time.

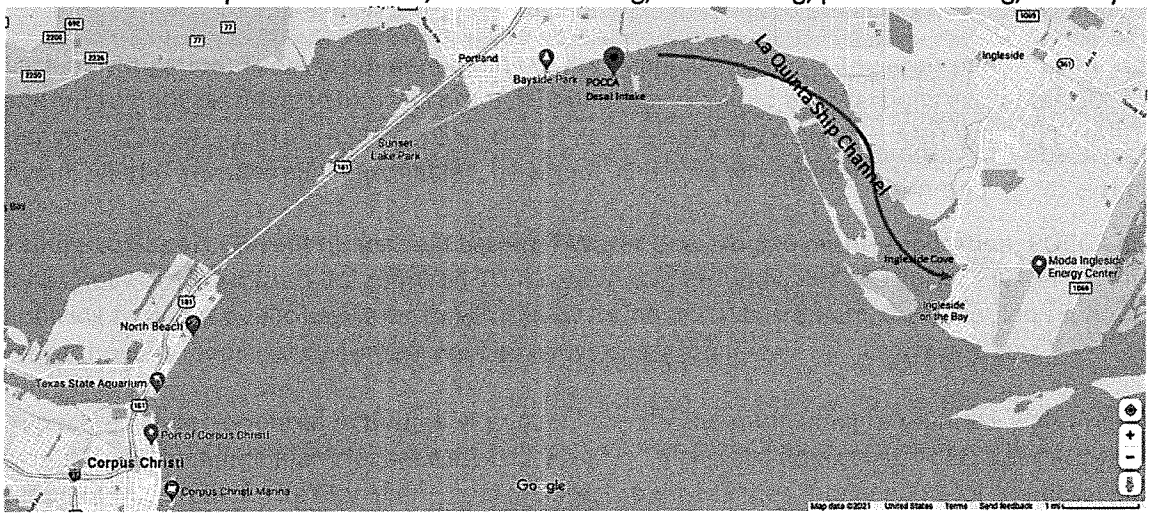
Affected Cities without Decision-Making Authority: Even though IOB and Portland will be directly affected by any plant proposed for La Quinta Channel (including a third plant under consideration by the City of Ingleside and Poseidon Water), our cities have been left out of the decision-making. Also, we do not receive notifications. This is just plain wrong!

Insufficient Environmental Flow: TAC Sec. 11.1471. ENVIRONMENTAL FLOW STANDARDS AND SET-ASIDES requires TCEQ to establish special environmental flow standards for the Corpus Christi Bay "that are adequate to support a sound ecological environment, to the maximum extent reasonable considering other public interests and other relevant factors". Special condition A in the draft permit does not appear to provide sufficiently detailed information to comply with §298.435 Water Right Permit Conditions: "flow restriction special conditions [must be] adequate to protect the environmental flow standards of this subchapter". How will "reasonable" and "adequate" be determined – and by whom?

Lack of Mitigation: There is no mention in the Port's application or in the draft permit of "reasonable actions to mitigate adverse impacts on such habitat" as required by diversions exceeding 5000 acre-feet per year (TAC Sec. 11.152. ASSESSMENT OF EFFECTS OF PERMITS ON FISH AND WILDLIFE HABITATS). Again, what is considered "reasonable", by whom, and who will monitor?

Failure to Report Current Industrial Customer Water Use: On p. 6 of the application, POCCA admits that it has not even submitted the required TWDB surveys of groundwater and surface water use. If POCCA is applying to divert public baywater to be used by its industrial customers, then shouldn't it have to report how its industrial customers are currently using groundwater and surface water?

Impact on Water-oriented Activities: It is inappropriate and misleading to separate water rights from wastewater discharge plans for seawater desalination plants. By doing that, TCEQ does not get the full scope of this project. The City of Portland is closest to the planned intake point for the desal plant, but the City of Ingleside on the Bay is downstream where the discharged brine will concentrate in Ingleside Cove near IOB, a major recreational area for our residents. Thus, both cities have a dog in this fight – just at opposite ends of the project – as shown in the map below. Note the proximity of Portland's popular Bayside Park to the intake site. Will park visitors be subjected to smells from the decaying organisms impinged on the intake filters? How will the water current from intake and discharge affect the numerous water sports in Portland, like kite boarding, wind surfing, paddle boarding, and kayaking?



Brine Discharge Buildup in Ingleside Cove Estuary: The whimsical image below, from a 1997 report on Corpus Christi Bay, depicts how millions of gallons per day of brine discharge will accumulate in Ingleside Cove by IOB - "analogous to concentration of salinity in estuary" (Ward, 1997, p. 253).

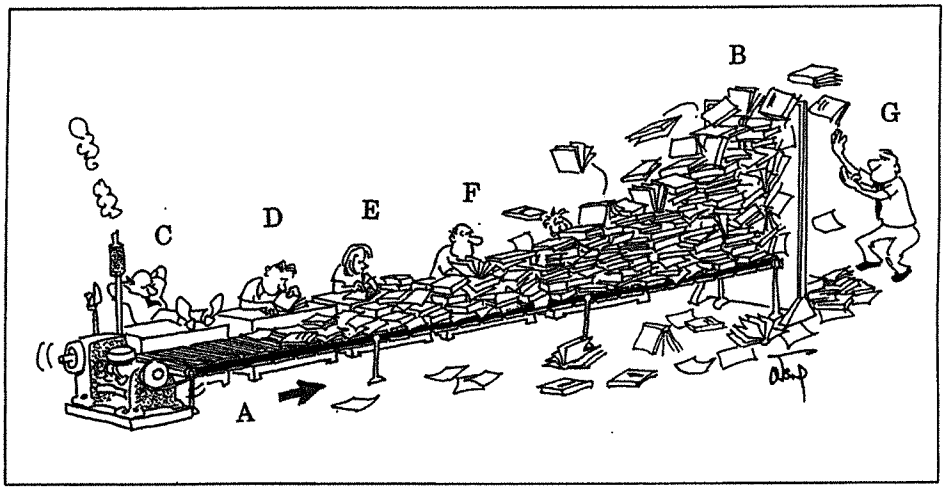


Figure 6-4. Conceptual model of salinity intrusion in estuary, as paper flow in state agency.

Conveyor belt (A) transports reports, contracts, and permit applications to right, until barrier (B) is encountered. Paper piles up and tumbles back up conveyor. Equilibrium is established between movement of conveyor and slope of paper pile. Supervisor (C) controls conveyor rate (freshwater inflow) and work assigner (G) maintains constant level of paper at barrier (ocean salinity). Amount of paper in front of each work station (D, E, F, proceeding down organization chart) is analogous to concentration of salinity in estuary.

Brine Disposal: POCCA appears to have conceded that the modeling does not support the volume of brine discharge that will result from this desal plant. Instead of just having their industrial customers pay for the pipelines to transport seawater from offshore and then brine back offshore under expedited TCEQ permit processing, they have commissioned a $149,000 study to look at "alternative brine management strategies". This includes combining the required remediation of the old Sherwin Alumina site with "beneficial reuse of brine for [red] mud lake treatment". This is a huge problem that was left on the doorstep of POCCA and Texas taxpayers, as described in this 2016 article (https://www.kirkland.com/news/in-the-news/2016/10/sherwin-cant-abandon-toxic-red-mud-beds-texas-says) . Flushing hundreds of millions of gallons of brine every day over the toxic red mud beds so that it can overflow on down La Quinta Channel directly to IOB is beyond horrifying!

Perpetual Water Rights: In a memo dated 1/25/21, Natural Resources Specialist Hal Bailey indicated to Sarah Garza of POCCA that water rights, once permitted, are perpetual – they do not end and do not need to be reviewed. TCEQ should have a process for reviewing whether water rights should continue – especially in this case – potentially the first seawater desalination plant in the state.

La Quinta Channel as Segment for Primary Contact: In Worksheet 5, there's a statement that "Area is a Bay. No downstream area." This is misleading. Ingleside in the Bay is downstream of La Quinta Channel, which is a nearly closed system that draws its waters from Corpus Christi Bay and travels down to Ingleside Cove, separated from the Bay by spoil islands with only two narrow exit points back out to the Bay. Questions 1c and 1d in Worksheet 1 were not answered, but should have been. Ingleside Cove is used for primary contact recreation by IOB residents. Since La Quinta is so heavily targeted for industrial development, it should have its own water segment number so that it can be more closely studied and understood.

Summary: In summary, please deny this permit. The desalinated water produced by a desalination plant with intake (let alone discharge) on La Quinta Ship Channel:

1) is not needed to support the people of the Coastal Bend
2) will destroy the aquatic life in the Channel thru impingement and entrainment and will drive away other wildlife – all part of the natural resources meant to be enjoyed by all Texans
3) will attract high-energy and high-water-using wasteful and harmful industries that will pollute our air, as well as the water, and
4) coupled with further cuts to the ship channels, will alter the hydrology of the Corpus Christi Bay system, potentially endangering coastal communities like IOB even further due to increased storm surge, more catastrophic flooding, stronger Gulf storms, and rising sea levels – all related to climate change – which is happening, at least in part, due to increasing industrialization

Thank you for consideration of my comments,

Kathryn Masten, Ph.D.
Executive Director, Ingleside on the Bay Coastal Watch

References:

Familkhalili, R. & Talke, S.A. The effect of channel deepening on tides and storm surge: A case study of Wilmington, NC. Geophysical Research Letters, 43(17), pp. 9138-9147.

Ward, G. (1997). Process and Trends of Circulation Within the Corpus Christi Bay: National Estuary Program Study Area, Publication CCBNEP – 21.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 30, 2021 8:37 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: tom@mciverproperties.com <tom@mciverproperties.com>
Sent: Monday, March 29, 2021 9:40 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Tom McIver

E-MAIL: tom@mciverproperties.com

COMPANY:

ADDRESS: PO BOX 35
FISCHER TX 78623-0035

PHONE: 2108329222

FAX:

COMMENTS: I write to you as a lifelong Texas resident, property owner in Aransas County, and beneficiary of the natural attributes of the unique and increasingly-fragile estuarine system of the Texas gulf coast. I strongly oppose the TCEQ permit for the Port of Corpus Christi Authority's plan for desal plant intake / discharge structures in La Quinta channel. I

request an extension of the deadline for comment and that a public meeting be held for community input. Given the potential environmental impact and level of community opposition, this permit merits a contested case hearing and I request such a hearing be held. My main reasons for opposing the permit are: 1. Potential negative impact on marine life due to elevated salinity levels in a system that is already subject to widely fluctuating and critical fresh water inflows. 2. Private sector industrial users would be the primary beneficiaries of the proposed plant. It seems equitable that private interests should pay for it. 3. Expert analysis published by such authorities as Texas Parks and Wildlife, the Texas General Land Office and UT Marine Science Institute report that desal intake and discharge facilities should be placed in designated areas offshore in the gulf where high brine content is more readily dissipated. Thanks for the opportunity to comment. Tom McIver

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Thursday, March 25, 2021 1:15 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: j4t7m@yahoo.com <j4t7m@yahoo.com>
Sent: Thursday, March 25, 2021 12:24 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: James Miday

E-MAIL: j4t7m@yahoo.com

COMPANY:

ADDRESS: 1112 BAYSHORE DR
INGLESIDE TX 78362-4702

PHONE: 3307050698

FAX:

COMMENTS: I strongly oppose the placing of an intake pipe for a desalination plant in the La Quinta Channel and feel there should be a two-week extension of for comments due to the recent freeze and loss of electricity. I also think there should be a public hearing be held for the citizens to express their concerns. I also request that a ontested case hearing

be held concerning this permit.ve I live in Ingleside On The Bay right on the Bay which provides my wife and I a great view of the bay and a fantastic observation point for the abundant wildlife in the bay. I am concerned that the intake for the Desal plant will have a detrimental effect on the ecological balance of the marine life by killing of the smaller marine animals which will cause a loss of the larger animals to include game fish, sea birds, shrimp, and crabs, not to mention the loss of our beautiful dolphins. I understand that the need of this permit is that this water is held in the public trust to be used for in best interest of the public. I don't feel that the building of desal plants to quench the unsatiable thirst of the major petrol chemical companies at the expense of our environment is in the best interest of the public. I believe that we should be investing in new technologies that would also bring good paying jobs to the area without all the damage to our infrastructure and environment.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 29, 2021 1:23 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: caydoc@gmail.com <caydoc@gmail.com>
Sent: Saturday, March 27, 2021 12:15 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: DR. William Norman Milner, JR

E-MAIL: caydoc@gmail.com

COMPANY: WNM Emergency Medicine, PLLC

ADDRESS: 14 SUGAR SHACK DR
WEST LAKE HILLS TX 78746-4630

PHONE: 5123477814

FAX:

COMMENTS: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel I request a two-week extension of the deadline for comments on account of the recent freeze and loss of

electricity in Texas. I request that a public meeting be held for the community to express its concerns. I request that a Contested Case Hearing be held

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 30, 2021 8:45 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: sheilanagy69@yahoo.com <sheilanagy69@yahoo.com>
Sent: Monday, March 29, 2021 11:38 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Sheila Nagy

E-MAIL: sheilanagy69@yahoo.com

COMPANY:

ADDRESS: 302 BAYSHORE DR
INGLESIDE TX 78362-4716

PHONE: 5129134252

FAX:

COMMENTS: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel I request a two-week extension of the deadline for comments on account of the recent freeze and loss of

electricity in Texas. I request that a public meeting be held for the community to express its concerns. I request that a Contested Case Hearing be held.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 23, 2021 3:43 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: annrnyberg@gmail.com <annrnyberg@gmail.com>
Sent: Tuesday, March 23, 2021 11:33 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Ann Nyberg

E-MAIL: annrnyberg@gmail.com

COMPANY:

ADDRESS: 320 INGLEWOOD
INGLESIDE TX 78362-4843

PHONE: 5126808989

FAX:

COMMENTS: My name is Ann Nyberg. I live at 320 Inglewood in Ingleside on the Bay. I am Mayor pro-tem and a member of the Ingleside on the Bay Coastal Watch Association. I strongly oppose the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel. I request a two-week extension of the deadline for comments

on account of the recent freeze and loss of electricity in Texas. I request that a public meeting be held for the community to express its concerns and I request a contested case hearing. I am very concerned about the impact this water rights permit will have on fishing. My son-in-law lives in Ingleside on the Bay. He supports his family and my grandchildren as a successful fishing guide. The livelihood of his family DEPENDS on the vitality of fish in the Bay. The intake pipe proposed for La Quinta Channel will suck in small fish and fish larvae. It will also kill larger fish that are pulled in by the suction and suffer trauma by running into the intake screen. Besides the financial impact to my family, I am also concerned about the impact this permit will have on our local birds. One of the great joys of living in IOB is enjoying the abundance of bird life. My grandkids love to play on the beach near La Quinta Channel and spot the local birds. However, these birds are dependent upon the small fishes in the water for their food source. Killing the fish will send the birds away. Please remember the people who depend on these waters for their livelihood and recreation. Thank you.

Lisa Guerra

From:	PUBCOMMENT-OCC
Sent:	Tuesday, March 30, 2021 9:16 AM
To:	PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject:	FW: Public comment on Permit Number WRPERM 13630
Attachments:	Public Comments - POCCA Desal Intake Permit WRPERM 13630.pdf

eComment = PM, H

Attachment = PM, H

From: emily@nyexp.us <emily@nyexp.us>
Sent: Monday, March 29, 2021 4:21 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Emily Nye

E-MAIL: emily@nyexp.us

COMPANY:

ADDRESS: 1018 BAYSHORE DR
INGLESIDE TX 78362-4647

PHONE: 3615620171

FAX:

COMMENTS: My name is Emily Nye. I live at 1022 Bayshore Dr. in Ingleside on the Bay, Texas, and I oppose the Port of Corpus Christi's water rights permit #13630. I ask that the permit be denied. In addition, I request an extension of the public comment period on account of the Texas freeze, a public meeting, and a contested case hearing. Please find my detailed comments attached. Thank you.

Emily C. Nye
1022 Bayshore Dr.
Ingleside, TX 78362

March 29, 2021

Ms. Lauri Gharis, Chief Clerk
Texas Commission on Environmental Quality
Office of the Chief Clerk, MC 105
P.O. Box 13087
Austin, Texas 78701-3087

Dear Ms. Gharis,

My name is Emily Nye. I am the Manager of Public Relations, Research, and Environmental Justice for the Ingleside on the Bay Coastal Watch Association. I live at 1022 Bayshore in Ingleside on the Bay, Texas. I oppose the TCEQ's draft water rights permit #13630 for the Port of Corpus Christi's proposed desalination facility on La Quinta Channel and ask that it be denied on account of its intended purpose being unnecessary to meet current demand, the cumulative environmental impact of two intake structures along La Quinta Channel, an error in the Port's application, and, most importantly, the fact that this project is opposed to the interest of the public.

According to the Port's own application, the purpose of the proposed project is not to meet demand generated by either current citizens or industries of the Coastal Bend. Rather, on page 1 of the application, Sarah Garza, Director of Environmental Planning & Compliance for the Port of Corpus Christi, states that "This project would provide the Coastal Bend Region with approximately 30 MGD of water for industrial supply use that will support *future* industrial needs."[1] While I support economic growth in the region, I do not support diminishing the quality of our local waters for the sole purpose of inviting industries with an inordinately high water demand to the region.

Not only is this water rights permit unnecessary, it would also devastate local fish and bird populations, especially when combined with the water rights permit now being sought by the City of Corpus Christi on La Quinta Channel. The Port's permit would allow 102,000 acre-feet of water to be diverted from the Bay annually and the City's permit would allow an additional 186,295 acre-feet to be diverted from the same area every year. That's a total of 288,295 acre-feet a year or 196.2 million gallons of water, roughly 300 Olympic size swimming pools, *every day*! Given this enormous rate of diversion from the La Quinta Channel, there is no doubt that hundreds of thousands of small fish will be impinged and millions of fish larvae will be entrained in the system. I live on the La Quinta Channel and enjoy fishing and boating with my family as well as watching the numerous bird species that populate this area on account of the abundant food supply.

[1] Emphasis added.

The quality of life that my neighbors and I enjoy stands to be precipitously impaired if the TCEQ chooses to administer this water rights permit.

In addition, the application by the Port of Corpus Christi contains a notable error. Worksheet 5.0: Environmental Information (pg. 29) of the Port's application requests the applicant identify the water body at the diversion point and the flow characteristics of that water body. The Port identifies the water body as Corpus Christi Bay (Segment 2481) but with regard to the flow characteristics, states: "Area is a Bay. No downstream area." This is simply not true. The diversion point in the Bay is located immediately next to the La Quinta Channel which is a virtually closed system with typical water flow moving from west to east.[2] This detail is extremely important because it means that the community of Ingleside on the Bay – where I reside – is immediately downstream from the diversion point. I respectfully request that the application be corrected to reflect this fact and that downstream communities receive affected party status.

Finally, and most significantly, this water rights permit is opposed to the interest of the people in San Patricio County, especially those living in the Cities of Portland and Ingleside on the Bay. My family has owned property on the coast of San Patricio County, overlooking Corpus Christi Bay, since Mother's Day 1967. Following the philosophy of "work hard, play hard," my grandfather, Former Chief Justice Paul W. Nye of the 13th Court of Appeals, took out a 30 year note to purchase a small, rundown, beach house across from Corpus Christi for $7,500, which he named "No Le Hace." Every weekend my grandfather would pack up his family, travel over the Harbor Bridge, and eat fried chicken as he watched the sunset on Friday nights. Saturday mornings, he and his boys, including my father (age 7), built the pier, added plumbing, and extended the house. They also fished. My father and his brothers spent hours catching red fish, black drum, and speckled trout. The beauty and serenity of this beachside property was a peaceful respite, away from the business and noise of Corpus Christi.

The legacy of "No Le Hace" continued into my childhood as my uncle, Patrick Nye, took ownership of the property. In the 90s, "No Le Hace" was a central gathering place for my extended family. My grandparents, aunts, uncles, and cousins would come from all corners of the globe to meet on the shores of San Patricio. We swam in the water, sat and talked by the shore, sailed, pretended to be pirates, and fished. We also ate. I have these special times to thank for my continued love of fresh gulf shrimp and red sauce.

In the new millennium, the Nye family suffered great loss as well as abundant joys. My grandparents, Paul and Nina Nye, both passed away, but their legacy grew, as we welcomed the last of their 16 grandchildren, and rejoiced in an additional 18 great-grandchildren. Today, my uncle still owns the original beach property and has built a beautiful new home, decorated with paintings of seashells by his mother, reminders of the original "No Le Hace." In 2020, I came to live in Ingleside on the Bay and moved into the house next door. Over the past year, I have relished watching the sunsets over Corpus Christi, kayaking with dolphins, exploring the spoil islands, boating in the summertime, and catching redfish, speckled trout, skipjack, and gafftop. In

[2] See the Leonard Rice Engineering Firm's study: "Desalination Brine Discharge Modeling – Corpus Christi Bay System" produced for the Port of Corpus Christi on October 21, 2019. The models illustrate an indisputable "flow" predominately west to east in La Quinta Channel. See for example Figure 24 on page 36.

September, my parents, siblings, and eight nieces and nephews came to "No Le Hace" for a birthday party. We had a blast swimming in the water and watching the sunset. A few months later, I invited two of my nieces and a nephew for a special sleepover (ages 7, 9, and 11). After dark, we walked to the end of the pier where, to their surprise, they each caught their own trout. I was so proud! The next day, we built sandcastles on the beach and collected a wide array of seashells.

Living on the shores of San Patricio in Ingleside on the Bay where my grandfather first bought property almost 54 years ago, has been a tremendous blessing. To enjoy the beauty and riches of the land and bay waters with my parents, aunt and uncle, brothers and sister, and nieces and nephews, is a gift beyond measure. Last September, a photo was taken at the new "No Le Hace." In the photograph, my father is sitting in an old wicker rocking chair, in which his grandmother once rocked his mother, and holding his newest grandson. This photo captures the essence of this place – a place spanning generations, where the dead are remembered, new life is celebrated, and the joy of living is passed on from one generation to the next.

To grant this water rights permit, which would critically deteriorate the quality of the bay waters, the vitality of aquatic life, and the abundant bird population, is to ignore the public interest of those who have lived along the Bay for generations. We treasure our homes, our memories, the beauty and serenity of life along the bay in San Patricio. I hope to one day bring my own children and grandchildren to these shores, teach them to fish and peel boiled shrimp, watch the birds, and tell them stories about their great-grandparents. But will there still be fish to catch? Will the birds have migrated away? Will my family's home be the same? Out of deep concern, I, hereby, submit a personal appeal to the TCEQ to recognize the public interest – my interest and that of the Nye family – in preserving the quality of this region and to protect the marine environment from permanent and irreversible degradation.

In conclusion, as stated above, I oppose draft water rights permit #13630 on account of its lack of necessity, the harm it will cause the environment, the applicant's failure to accurately acknowledge communities of impact, and, finally, its opposition to the public interest. I request an extension for public comment on account of the Texas freeze, a public meeting, and a contested case hearing.

Sincerely,

Emily C. Nye
Manager of Public Relations, Research,
And Environmental Justice

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 30, 2021 9:13 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630
Attachments: IOBCWA_Comments POCC WR 13630 Permit CCH 20210329.pdf

eComment = PM, H
Attachment = PM. H

From: patrick@nyexp.us <patrick@nyexp.us>
Sent: Monday, March 29, 2021 3:53 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Patrick Nye

E-MAIL: patrick@nyexp.us

COMPANY:

ADDRESS: 1018 BAYSHORE DR
INGLESIDE TX 78362-4647

PHONE: 3616581089

FAX:

COMMENTS: My name is Patrick Nye. Please see my comments attached. I oppose the Port of Corpus Christi's WRPERM 13630. I request a two week extension for comments on account of the Texas freeze, a public meeting, and a contested case hearing. Thank you.

Patrick A. Nye, President
Ingleside on the Bay Coastal Watch Association
1018 Bayshore
Ingleside, Texas 78362

IOBCWA

March 29, 2021

Ms. Lauri Gharis, Chief Clerk
Texas Commission on Environmental Quality
Office of the Chief Clerk, MC 105
P.O. Box 13087
Austin, Texas 78701-3087

RE: Port of Corpus Christi's La Quinta Water Rights Desalination Permit #13630
Request for Denial of Permit by TCEQ
Request for Contested Case Hearing
Request for Two Week Extension for Comment Period
Request for Public Meeting

Dear Sir or Madam,

On behalf of the Ingleside on the Bay Coastal Watch Association (IOBCWA), as President of the Board of the Association, I am submitting this request for you to deny the Port of Corpus Christi's La Quinta Water Rights Desalination Permit #13630 and to acknowledge that IOBCWA requests a Contested Case Hearing, a two-week extension of the comment period, and a public meeting.

As a born and raised Corpus Christian now living in Ingleside on the Bay, the idea of desal within the confines of Corpus Christi Bay is preposterous to consider given that this technology is unproven in a silty, high suspended solids, closed-bay environment. More importantly, this Port of Corpus Christi (POCC) Water Rights permit affects the people of Portland, Texas as the intake will endanger and cause potential harm to individuals and the quality-of-life Corpus Christi Bay provides. Fishermen, swimmers, kite and sailboarder enthusiasts will pay a severe price for the gluttony of the POCC's insatiable thirst for polluting industries that threaten the health and welfare of Texans. Granting a water rights permit without the science to back it up is against the very principles that the TCEQ, EPA, GLO, TPWD and USFWL have based their environmentally sensitive, nonpoliticized judgement upon. A water rights permit that will be handed off to other, potentially less scrupulous, owners creates a platform for future problems that will forever change our way of life on the coast of San Patricio county.

Evidence filed during the POCC Harbor Island desal Contested Case Hearing is solidly against desalination projects inshore of the barrier islands. Taking intake and discharge offshore is the only logical solution, endorsed by Texas Parks & Wildlife, University of Texas Marine Institute, Harte Institute, and countless other scientists. In addition, many believe that this water rights permit by POCC is a ploy to bring industry to San Patricio County along with all of the

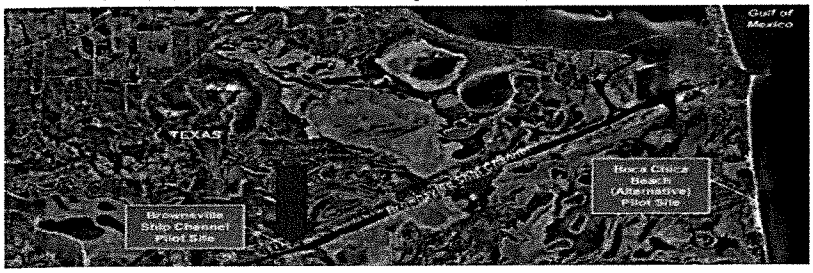
environmental liabilities to its residents. Expanding industries in San Patricio County by a stacked, heavily biased, Port Commission, inequitably burdens an underrepresented population with heavy polluting industries that will further degrade our bay and our quality of life.

There is a serious threat to the health and safety of persons living in the proximity of the intake. The proposed water rights intake states that tremendous volumes of bay water would be sucked in. This creates an endangerment within Corpus Christi Bay that is unreasonable. An intake area must be expanded to service equipment. This area would also need an enormous safety area around the intake to protect swimmers, sail and kite boarders, fishermen, sailboats and power boaters from entering. Impingement and entrainment will undoubtably occur due to the proximity of seagrass beds and seagrass mitigation plots (see google map image below). Not to mention, the POCC has NO IDEA where and what to do with the brine discharge.

The POCC claims that the desalination facility will be built and operated by others and yet a ***bay water desalination facility within a bay system caped by a massive barrier island does not exist anywhere in the world***. There is no precedent for desalination succeeding within Corpus Christi Bay or anything like it. High levels of suspended solids, larvae and planktonic organisms plagued the most comparable desalination facility in the Brownsville, Texas, ship channel. Costing $67 million, the 2008 Brownsville project ultimately failed in its attempt to produce only 2.5 MGD.

Estimated cost to build a 2.5 MGD seawater desal plant in the ship channel: $67 million (2008)

Brownsville did a government-funded pilot seawater desal plant 2004, within the local ship channel



Projects in Carlsbad, California, and Tamp Bay, Florida, have rarely produced the amount of water projected by their respective companies and have huge costs overruns and bankruptcies. In addition, the locations of the desalination facilities in Carlsbad, California, and Tampa Bay, Florida, are dissimilar to the location of the POCC's desalination facility in significant ways. The Carlsbad facility is directly on the Pacific Ocean, not deep within a bay system, and the Tampa Bay facility is located within a bay that opens directly into the Gulf of Mexico. The Port's proposed facility, in contrast, is located deep within Corpus Christi Bay which is protected from the Gulf by the longest barrier island in the world. Therefore, any direct comparison between the facilities is inaccurate. Additionally, CC Polymers has been trying to operate a desal facility in Corpus Christi's inner harbor, announcing this project initially in 2014. Permits have been acquired by CC Polymers and yet remain unused. Why not allow this facility to come online first as a pilot facility in Corpus Christi Bay prior to granting any other permits for desalination in our unique bay system?

Ultimately, the science says: *take the intake and discharge offshore*. The question is, why allow a perpetual water rights permit for the POCC when they do not have plans to build, have not provided costs to operate, nor calculated energy usage and the POCC has no idea how to discharge the brine into our fragile bay environment?

In summary, IOBCWA opposes the POCC water rights permit as there is not a "necessity of need" and there is an extremely high risk of environmental calamity. Proponents for desal are not accurately stating the facts. There are other options including recycling industries' wastewater as well as municipal wastewater. My prayer is that the TCEQ considers all of the facts in their determination as mandated by TCEQ's mission statement.

Sincerely yours,

Patrick A. Nye
President, Ingleside on the Bay Coastal Watch Association

Elisa Guerra

From:	PUBCOMMENT-OCC
Sent:	Thursday, March 25, 2021 9:23 AM
To:	PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject:	FW: Public comment on Permit Number WRPERM 13630
Attachments:	La Quinta Desal Plant.docx

eComment = Comment
Attachment = PM, H

From: jujutweetybird@gmail.com <jujutweetybird@gmail.com>
Sent: Wednesday, March 24, 2021 3:14 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Mary Judith Orr

E-MAIL: jujutweetybird@gmail.com

COMPANY:

ADDRESS: PO BOX 1788
ARANSAS PASS TX 78335-1788

PHONE: 3612384598

FAX:

COMMENTS: We, as the community of Ingleside on the Bay, are very concerned with the proposed Desal plant. These plants have proven to be detrimental to the environment and we do not want our environment damaged and wildlife

killed due to the destructive side effects of the proposed plant. Please see attached document for further reasons we are so against this proposal.

Opposition and Request

- **I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel**
- **I request that a public meeting be held for the community to express its concerns.**
- **I request that a Contested Case Hearing be held**

Reasons:

According to the permit, the Port of Corpus Christi would be allowed to suck 62,890 gallons of water from La Quinta Channel every minute. Sucking in that amount of water that fast will require an enormous amount of suction power and I am concerned about aquatic life being trapped or killed in the process. This intake pipe is a death sentence!

- I and my family members (spouse, children, grandchildren) love to fish/boat/swim/etc. along the Portland Shoreline where the intake pipe for the Port of Corpus Christi's desalination facility will be located or in Ingleside Cove where the discharge will flow to. I am concerned that given the number of small larvae which will be sucked up, turned to sludge, and deposited into landfills, fishing will be badly impaired in the region.
- I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish - or for people! If the fish die, then the birds we love to watch will also die or leave the area.
- I am concerned about possible health effects on me or my family from the chemicals used in the desalination process, including pre-treatment.
- My neighbors fish for business and I am concerned about loss of income that will happen when aquatic life in La Quinta Channel and Corpus Christi Bay is harmed/destroyed by this desal plant. Which in turn will cause economic harm to our small community
- Many of us suffered through the historic winter storm in February 2021 and were without power for several days in freezing temperatures due to the amount of demand placed on the electrical grid in Texas. The operating pumps required to suck 62,890 gallons of water per minute will take an enormous amount of power, placing even more strain on the grid. I am opposed to issuing a permit which would demand excessive amounts of energy to supply water only for industrial use.
- Most of the desalinated water will be used by industry for cooling purposes. Aren't there federal regulations that apply to industrial cooling water intake structures?
- Since Corpus Christi Bay connects to the Gulf of Mexico, doesn't diverting water from Corpus Christi Bay to support private industry without federal oversight amount to stealing from the Waters of the United States (WOTUS)?
- Since Texas is already drought-prone and gets very hot, why is the Port of Corpus Christi enticing such thirsty high-energy-requiring industries to come here in the first place? Shouldn't they go where it's cooler and where there's more water?

- Since this desal plant has been listed as a "recommended water strategy" on the Region N Water Plan for 2021, I expect that the Port of Corpus Christi will try to get a low-interest loan from the Texas Water Development Board (TWDB) to construct the plant. Isn't it a violation of Texas law to use public funds to support private industry? Who will have to pay back such a loan?
- All of our area scientists, including from Texas Parks & Wildlife, the General Land Office, the UT Marine Science Institute, and the Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. There's even an expedited permitting process for this. Why is the Port of Corpus Christi, a public entity, insisting on putting intake and discharge inside Corpus Christi Bay in the first place. Aren't they listening? Why aren't they showing the way by pursuing the expedited permit process that will keep our Bay safer?
- Why is the Port applying for this permit? Shouldn't it be the private industries that plan to use the desalinated water?
- Why aren't industries paying to construct this plant?
- Why aren't industries paying for pipelines to bring in water from offshore and pump the brine back offshore? After all, they pay for other pipelines that cross San Patricio County, tearing up communities and farm land.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Thursday, March 25, 2021 8:47 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: osterj5@gmail.com <osterj5@gmail.com>
Sent: Wednesday, March 24, 2021 9:49 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Jacob Oster

E-MAIL: osterj5@gmail.com

COMPANY:

ADDRESS: 4263 OCEAN DR
CORPUS CHRISTI TX 78411-1253

PHONE: 4436240841

FAX:

COMMENTS: I am writing this comment because I have several friends who live in Ingleside on the Bay and I am deeply concerned about how this desalination plant may affect the quality of life for residents as well as the animal and plant life in the channel and Corpus Christi Bay. I understand there is a growing need for water in the greater Corpus Christi

area, but there are several studies I've read suggesting that the intake and brine discharge can be quite detrimental to sea grasses and larval fish. I live 11.5 miles from La Quinta Channel on the other side of the Corpus Christi Bay and know how highly valued recreational fishing is in Corpus Christ, so I find it disconcerting that several scientists have stated the discharge and intake should take place in the Gulf of Mexico and this advice is not being followed. I also don't understand why public funds are being used to support this initiative for private industries, as this seems a conflict of interest to me. Therefore, I am strongly opposed to the Port of Corpus Christ constructing an intake pipe for the desalination plant in La Quinta Channel, and I request a two week extension for the deadline of comments in light of Winter Storm Uri. I also request that a public meeting be held so the greater community can express its concerns and that a Contested Case Hearing be held.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 29, 2021 1:37 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

H

From: bp120380@gmail.com <bp120380@gmail.com>
Sent: Monday, March 29, 2021 12:01 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Blanca Parkinson

E-MAIL: bp120380@gmail.com

COMPANY:

ADDRESS: 10801 SILVERTON DR
CORPUS CHRISTI TX 78410-2233

PHONE: 3617042775

FAX:

COMMENTS: My name is Blanca Parkinson. I live at 10801 Silverton Dr. Corpus Christi, TX 78410. We have family that lives in Portland, TX, along the shores of Corpus Christi Bay. We frequently recreate in the bays and bay side parks in the Portland area partly because of our relatives in Portland, and partly because the Nueces Bay located near our home is no longer a place were we can recreate safely since witnessing a horrific explosion on Aug 21, 2020, in which six people

were killed, less than six miles from our home. I am a former teacher, and I now home school my three sons. My sons fish, kayak, and swim in those waters near the area where this proposed intake pipe will be placed. They also frequently attend gatherings and meet-ups with other home schooled children from all over the Coastal Bend in those areas. My oldest son is part of a running team that trains in Portland, at the hiking trail located by Sunset Lake Park/ Indian Point Pier. I have many concerns and strongly oppose the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel. I am concerned with the effect that this will have on the aquatic life that lives in these bay systems. Area scientists have all recommended that intake and discharge should occur offshore. The Port is ignoring the consequences that will come with the placement of this intake pipe in a closed bay. Why does the Port of CC insist on building this in our backyards, where our children play, excercise, and fish? To save industries the trouble or the expense of having to do things correctly? Recently, we experienced a freeze that left many of us without power. My family, along with at least 1000 other households in my neighborhood alone were left without power for over three days. We had small children in freezing temperatures. Our home was between 33 and 32 degrees for days. We were given no explanation other than our power was turned off and would not be restored until the grid could handle the usage. What will the effects of a huge desalination intake pump sucking enormous amounts of water and using enormous amounts of energy to do so, have on our energy grid? Has the Port considered this? Are we the citizens, going to be competing with an energy-sucking desalination plant every time we have a hurricane, an ice storm, or another shortage on the energy grid? I strongly oppose the building of any structure which will consume enormous amounts of energy. The Port has misleadingly presented this as a "recommended water strategy", when in fact most of the water will be used for industrial purposes. Who will pay for the cost of building of this structure? The Port seems to have forgotten that it is a public entity in Nueces County. Why is the Port even applying for these permits, when the water is for industrial purposes? The answer to these questions is clear to me as a taxpayer- the Port abandoned the best interest of area residents in exchange for the comfort and protection of the industries that will suck the water and life out of our bays, all while misleading us, and telling us that they know more than anyone else what we citizens need. The Port has left us, the citizens, nowhere to turn other than the TCEQ. Today, I am asking you to please listen to us. Imagine your children slowly losing all the places they love and need to play. That is what is happening to the children of this region with the granting of permits like this one to entities such as the Port of CC, who have shown a complete disregard for the best interest of the public. Please deny this permit, and preserve for our children one of the most important bays in our region. This bay is not some industrial dump. It is the face of Corpus Christi, Portland and Ingleside. It is home to area attractions. On any given day, these shores are busy with citizens enjoying the natural beauty of their cities. I would also like to request an extension to the comment period, so those of us recently affected by the disruptions of the ice storm, can have some time to ask questions and get informed. I would also like to request a contested case hearing for this permit, so that we may get some answers to our questions. Thank you for your time.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 30, 2021 9:33 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

H

From: blanctopher@gmail.com <blanctopher@gmail.com>
Sent: Monday, March 29, 2021 5:35 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Kristopher Parkinson

E-MAIL: blanctopher@gmail.com

COMPANY:

ADDRESS: 10801 SILVERTON DR
CORPUS CHRISTI TX 78410-2233

PHONE: 3617042776

FAX:

COMMENTS: My name is Kristopher Parkinson. I live at 10801 Silverton Dr. Corpus Christi Tx 78410. I fish, kayak, and swim in the waters surrounding Portland and Ingleside due to the fact that the waters near my home are dangerous, and sadly, no longer suitable for recreation. My kids and I already had to witness an explosion on Aug 21, 2020. Six people died less than five miles from our home, along Joe Fulton Corridor. My children also practice and train along the shores

that would be impacted by the approval of this permit. According to what I've read from scientists from the Harte Institute, UT Marine Science Institute, and the Texas Parks and Wildlife, to place this intake pipe in our closed bay system would be a mistake and cause death of marine wildlife, and essentially, the death of our bay. In my profession as an Emergency Room nurse, it is expected that I stay in town and respond during emergency situations and natural disasters. For me, and sometimes for my family, evacuating is not an option. We recently experienced a winter ice storm and were left without power for over three days .Our entire neighborhood was without power. I oppose the building of any plant or pump that is going to further strain the electrical grid. Those of us who do not have the option to evacuate during tough times should be taken into consideration in the Port's decisions. Instead, we are dismissed and ignored, while the Port looks for ways to save big industries the trouble of sucking and discharging water OFFSHORE, where it is recommended by scientists. All to produce water that will primarily be used for industrial purposes. I ask that the TCEQ please keep us in mind, since the Port has completely disregarded us in the application of this permit. Deny the Port's application. Furthermore, how will loans for the building of such plants be repaid? Those of us who call the Coastal Bend home, know what we need. We need a place to live our lives free of worry of contaminants, pollution, and explosions. We don't need to compete with huge plants sucking enormous amounts of energy during hurricanes and times of bad weather. We don't need to spend millions on projects that will destroy one of the few places where our kids can still play. I would like to request an extension on the public commenting period. I also feel that a contested case hearing is very necessary and am requesting one. Again, I ask that you please keep residents of the area in mind, and I thank you for you time.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 23, 2021 3:46 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: claypony3972@gmail.com <claypony3972@gmail.com>
Sent: Tuesday, March 23, 2021 3:38 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Clayton Poenisch

E-MAIL: claypony3972@gmail.com

COMPANY:

ADDRESS: 1489 S MAIN ST
INGLESIDE TX 78362-9781

PHONE: 3617750469

FAX:

COMMENTS: My name is Clayton Poenisch. I live at 1489 Main Street in Ingleside, Texas. I am 90 years old and have lived along Corpus Christi Bay my entire life. When I was growing up, my Dad use to grab an oyster out of the Bay, open it, and have a snack. No more. The waters have suffered from increased pollution year after year. I say "STOP!" I oppose

the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel. I request a public meeting and a contested case hearing. Thank you.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 8, 2021 11:34 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: drlgporter@yahoo.com <drlgporter@yahoo.com>
Sent: Thursday, March 4, 2021 9:47 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Lynne Porter

E-MAIL: drlgporter@yahoo.com

COMPANY:

ADDRESS: PO BOX 335
INGLESIDE TX 78362-0335

PHONE: 3615631627

FAX:

COMMENTS: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel.I request a two-week extension of the deadline for comments on account of the recent freeze and loss of electricity in Texas.I request that a public meeting be held for the community to express its concerns.I request that a

Contested Case Hearing be held.According to the permit, the Port of Corpus Christi would be allowed to suck 62,890 gallons of water from La Quinta Channel every minute. Sucking in that amount of water that fast will require an enormous amount of suction power and I am concerned about aquatic life being trapped or killed in the process. This intake pipe is a death sentence!I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish - or for people! If the fish die, then the birds we love to watch will also die or leave the area.Many of us suffered through the historic winter storm in February 2021 and were without power for several days in freezing temperatures due to the amount of demand placed on the electrical grid in Texas. The operating pumps required to suck 62,890 gallons of water per minute will take an enormous amount of power, placing even more strain on the grid. I am opposed to issuing a permit which would demand excessive amounts of energy to supply water only for industrial use.Il of our area scientists, including from Texas Parks & Wildlife, the General Land Office, the UT Marine Science Institute, and the Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. There's even an expedited permitting process for this. Why is the Port of Corpus Christi, a public entity, insisting on putting intake and discharge inside Corpus Christi Bay in the first place. Aren't they listening? Why aren't they showing the way by pursuing the expedited permit process that will keep our Bay safer?

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 23, 2021 3:45 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630
Attachments: La Quinta Desal Plant.docx

PM
H

From: lmtriley@aol.com <lmtriley@aol.com>
Sent: Tuesday, March 23, 2021 3:44 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Lisa T. Riley

E-MAIL: lmtriley@aol.com

COMPANY:

ADDRESS: 344 INGLEWOOD
INGLESIDE TX 78362-4843

PHONE: 3618776344

FAX:

COMMENTS: Please see attached document with my full beliefs and opinions on why the granting of the permit would be devastating to my community. Thank you

Opposition and Request

- **I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel**
- **I request that a public meeting be held for the community to express its concerns.**
- **I request that a Contested Case Hearing be held**

Reasons:

According to the permit, the Port of Corpus Christi would be allowed to suck 62,890 gallons of water from La Quinta Channel every minute. Sucking in that amount of water that fast will require an enormous amount of suction power and I am concerned about aquatic life being trapped or killed in the process. This intake pipe is a death sentence!

- I and my family members (spouse, children, grandchildren) love to fish/boat/swim/etc. along the Portland Shoreline where the intake pipe for the Port of Corpus Christi's desalination facility will be located or in Ingleside Cove where the discharge will flow to. I am concerned that given the number of small larvae which will be sucked up, turned to sludge, and deposited into landfills, fishing will be badly impaired in the region.
- I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish - or for people! If the fish die, then the birds we love to watch will also die or leave the area.
- I am concerned about possible health effects on me or my family from the chemicals used in the desalination process, including pre-treatment.
- My neighbors fish for business and I am concerned about loss of income that will happen when aquatic life in La Quinta Channel and Corpus Christi Bay is harmed/destroyed by this desal plant. Which in turn will cause economic harm to our small community
- Many of us suffered through the historic winter storm in February 2021 and were without power for several days in freezing temperatures due to the amount of demand placed on the electrical grid in Texas. The operating pumps required to suck 62,890 gallons of water per minute will take an enormous amount of power, placing even more strain on the grid. I am opposed to issuing a permit which would demand excessive amounts of energy to supply water only for industrial use.
- Most of the desalinated water will be used by industry for cooling purposes. Aren't there federal regulations that apply to industrial cooling water intake structures?
- Since Corpus Christi Bay connects to the Gulf of Mexico, doesn't diverting water from Corpus Christi Bay to support private industry without federal oversight amount to stealing from the Waters of the United States (WOTUS)?

- Since Texas is already drought-prone and gets very hot, why is the Port of Corpus Christi enticing such thirsty high-energy-requiring industries to come here in the first place? Shouldn't they go where it's cooler and where there's more water?
- Since this desal plant has been listed as a "recommended water strategy" on the Region N Water Plan for 2021, I expect that the Port of Corpus Christi will try to get a low-interest loan from the Texas Water Development Board (TWDB) to construct the plant. Isn't it a violation of Texas law to use public funds to support private industry? Who will have to pay back such a loan?
- All of our area scientists, including from Texas Parks & Wildlife, the General Land Office, the UT Marine Science Institute, and the Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. There's even an expedited permitting process for this. Why is the Port of Corpus Christi, a public entity, insisting on putting intake and discharge inside Corpus Christi Bay in the first place. Aren't they listening? Why aren't they showing the way by pursuing the expedited permit process that will keep our Bay safer?
- Why is the Port applying for this permit? Shouldn't it be the private industries that plan to use the desalinated water?
- Why aren't industries paying to construct this plant?
- Why aren't industries paying for pipelines to bring in water from offshore and pump the brine back offshore? After all, they pay for other pipelines that cross San Patricio County, tearing up communities and farm land.

Elsa Guerra

From:	PUBCOMMENT-OCC
Sent:	Tuesday, March 23, 2021 3:50 PM
To:	PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject:	FW: Public comment on Permit Number WRPERM 13630
Attachments:	La Quinta Desal Plant.docx

PM
H

From: royleeiob@gmail.com <royleeiob@gmail.com>
Sent: Tuesday, March 23, 2021 3:47 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Roy L Riley

E-MAIL: royleeiob@gmail.com

COMPANY:

ADDRESS: 344 INGLEWOOD
INGLESIDE TX 78362-4843

PHONE: 3618771297

FAX:

COMMENTS: Please see the attached statement which whole heartedly expresses my opinions and beliefs regarding the above referenced permit number. Thanks.

Opposition and Request

- **I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel**
- **I request that a public meeting be held for the community to express its concerns.**
- **I request that a Contested Case Hearing be held**

Reasons:

According to the permit, the Port of Corpus Christi would be allowed to suck 62,890 gallons of water from La Quinta Channel every minute. Sucking in that amount of water that fast will require an enormous amount of suction power and I am concerned about aquatic life being trapped or killed in the process. This intake pipe is a death sentence!

- I and my family members (spouse, children, grandchildren) love to fish/boat/swim/etc. along the Portland Shoreline where the intake pipe for the Port of Corpus Christi's desalination facility will be located or in Ingleside Cove where the discharge will flow to. I am concerned that given the number of small larvae which will be sucked up, turned to sludge, and deposited into landfills, fishing will be badly impaired in the region.
- I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish - or for people! If the fish die, then the birds we love to watch will also die or leave the area.
- I am concerned about possible health effects on me or my family from the chemicals used in the desalination process, including pre-treatment.
- My neighbors fish for business and I am concerned about loss of income that will happen when aquatic life in La Quinta Channel and Corpus Christi Bay is harmed/destroyed by this desal plant. Which in turn will cause economic harm to our small community
- Many of us suffered through the historic winter storm in February 2021 and were without power for several days in freezing temperatures due to the amount of demand placed on the electrical grid in Texas. The operating pumps required to suck 62,890 gallons of water per minute will take an enormous amount of power, placing even more strain on the grid. I am opposed to issuing a permit which would demand excessive amounts of energy to supply water only for industrial use.
- Most of the desalinated water will be used by industry for cooling purposes. Aren't there federal regulations that apply to industrial cooling water intake structures?
- Since Corpus Christi Bay connects to the Gulf of Mexico, doesn't diverting water from Corpus Christi Bay to support private industry without federal oversight amount to stealing from the Waters of the United States (WOTUS)?

- Since Texas is already drought-prone and gets very hot, why is the Port of Corpus Christi enticing such thirsty high-energy-requiring industries to come here in the first place? Shouldn't they go where it's cooler and where there's more water?
- Since this desal plant has been listed as a "recommended water strategy" on the Region N Water Plan for 2021, I expect that the Port of Corpus Christi will try to get a low-interest loan from the Texas Water Development Board (TWDB) to construct the plant. Isn't it a violation of Texas law to use public funds to support private industry? Who will have to pay back such a loan?
- All of our area scientists, including from Texas Parks & Wildlife, the General Land Office, the UT Marine Science Institute, and the Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. There's even an expedited permitting process for this. Why is the Port of Corpus Christi, a public entity, insisting on putting intake and discharge inside Corpus Christi Bay in the first place. Aren't they listening? Why aren't they showing the way by pursuing the expedited permit process that will keep our Bay safer?
- Why is the Port applying for this permit? Shouldn't it be the private industries that plan to use the desalinated water?
- Why aren't industries paying to construct this plant?
- Why aren't industries paying for pipelines to bring in water from offshore and pump the brine back offshore? After all, they pay for other pipelines that cross San Patricio County, tearing up communities and farm land.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Thursday, March 25, 2021 5:18 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: debbierowe412@yahoo.com <debbierowe412@yahoo.com>
Sent: Thursday, March 25, 2021 3:19 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Debra Rowe

E-MAIL: debbierowe412@yahoo.com

COMPANY:

ADDRESS: 1547 MORGAN LN
INGLESIDE TX 78362-9776

PHONE: 3615239688

FAX:

COMMENTS: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel and I request a two-week extension of the deadline for comments on account of the recent freeze and loss of electricity in Texas. I request that a public meeting be held for the community to express its concerns. I request that a

Contested Case Hearing be held. I am concerned about possible health effects on me or my family from the chemicals used in the desalination process, including pre-treatment.

To: TCEQ Chief Clerk

Date: March 22, 2021

From: Encarnacion Serna

Subject: Request for a Contested Case Hearing and Comment Letter for Steel Dynamics Permit Application WQ0005283000

Dear TCEQ Chief Clerk:

Attached please find enclosed hard copy of document commenting on the above referenced permit application and request for a Contested Case Hearing. I tried to attach this document electronically to my request for a Hearing on the TCEQ web page but the system rejected it due to its size, therefore the reason for submitting via U.S. Mail.

The time limit for submitting comments on this is March 30, or 31st , please make sure this document reaches the appropriate TCEQ review and decision personnel in time.

I have also attached a copy of a document containing my request for a contested case hearing on permit application WRPERM 13630 by Port of Corpus Christi. I previously submitted a request electronically, but I do not know at this time if the attachment successfully entered the TCEQ data base. The time limit for submitting comments on this is March 29, please make sure this document also reaches the appropriate TCEQ review and decision personnel in time.

REVIEWED
MAR 26 2021
By GCW

Respectfully;

Encarnacion Serna (361-903-5774)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2021 MAR 25 AM 10:46
CHIEF CLERKS OFFICE

REVIEWED
MAR 26 2021 PM
BY GCW H

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

2021 MAR 25 AM 10: 47

CHIEF CLERKS OFFICE

Unedited (due to limited resources and time)

To: Various Stakeholders

Date: March 20, 2021

From: Encarnacion (Chon) Serna

Subject: Steel Dynamics (SD) Waste-Water Discharge Permit Application WQ0005283000 Comments

My name is Encarnacion Serna. My wife Rosa and I reside at 105 Lost Creek Drive in Portland, Texas. We have lived in this home since July 1991. My telephone number is 361- 903-5774. We have lived in Portland Texas since 1980.

I am requesting a Public Meeting and a Contested Case Hearing on WQ0005283000. The applicant for this Permit is Steel Dynamics Southwest, LLC.

Although I do not live within the one-mile radius (the ridiculous abusive TCEQ Rule) of the proposed wastewater discharge point from this facility. My family and I fish and will continue to fish from both Chilitipin Creek and Copano Bay for the following three reasons:

1. **Small Fish and crustaceans will soon no longer live to hatch or be available for the consumption of the bigger predatory fishes from the Corpus Christi Bay System since the Port of Corpus Christi and the City of Corpus Christi will mechanically kill all baby fish their eggs and all larvae. This will happen on the inlet screens, inlet pipes etc. of their proposed desalination plant water intake structures, and whatever the intake structures will not mechanically kill, the chemical treatment in the pre-treatment plant will; to protect their expensive reverse osmosis membranes.**
2. **And the bigger adult members of all fish and crustacean species the ones that spawn, and the ones we catch to eat are scarce already and will soon also be completely killed by the high salinities (greater than 7.7 %) and reduced dissolved oxygen (less than 6.5 ppm) present in the very large discharge volumetric flows from these desalination plants. The high salinity concentration in the discharges going back to the Bay will finish the extermination job of all aquatic life in this Bay System.**
3. **Fish and crustaceans from HEB or anywhere else are no longer affordable to my family and myself.**

Therefore, to adjust to this food loss from the Corpus Christi Bay for my family and I, my children, grandchildren, in-laws, and I will intensify and improve our fishing skills to fish alligator gar, catfish, and crawfish from Chilitipin and whatever saltwater fish species may remain and still be legal in Copano Bay we will go for. We will intensify efforts and get even better and more fit in wading, gigging, and kayaking to make this happen.

Based on my assessments of the permit application and the TCEQ Executive Director's (ED) Response to Public comment and Draft Permit dated March 1, 2021 (The ED Document), I hereby request that this application be withdrawn/denied immediately. If not withdrawn/denied immediately, then I am also requesting at this time a Contested Case Hearing.

I offer my technical comments on these documents as follows:

General Comments:

1. I read the above-mentioned application with its 500 plus pages. It is a major waste-water discharge permit no matter how it gets labeled/characterized by the Applicant or the TCEQ. The steel mill plant proposed by this project for which SD seeks a wastewater permit from the TCEQ has the strong potential for catastrophic consequences to the environment and to human health. Based on everything I have read so far, the steel mill facility and its waste-water processing plant, described on this application are now a footprint for a future superfund site that no financial assurance (if there was to be any, but there is none) no federal, no state or any other program or any amount of money would be able to remediate or at least restore the site to some acceptable condition.
2. I also read the TCEQ Executive Director's (ED) Response to Public comment dated March 1, 2021, i.e., the 100 plus page report that does very little to guarantee the protection of the environment affected by the future construction of this project. I have never seen in my life more than one hundred (100) pages and 82 "sorry" answers to 82 very valid questions with answer contents so evasive and so saturated with excuses for not wanting to, or for not being able to protect the environment, and for not being able to address the legitimate concerns of the people that contrary to the TCEQ are so genuinely concerned and united in ensuring this protection be provided. This response by the TCEQ ED portrays a picture of impotence and unwillingness on the part of this Agency and forces the concerned citizen to completely lose any faith that once this project is licensed to operate that there will be any regulating, enforcing to comply, or any other action from the TCEQ to protect the environment and human health from the proposed polluting water discharges.

Specific Comments Questions and Requests:

1. **Engineering Credentials.** This permit application submitted to the TCEQ in October of 2019 by SD/Hanson Engineering (The Applicant) was not signed, sealed, and dated by a Registered Professional Engineer Licensed to Practice in The State of Texas. But on the other hand, please note that SD requested and obtained a dated, signed, and sealed, by two Registered Professional Engineers Licensed to Practice in The State of Texas The Geotechnical Report for the site (Attachment B in the Application, Report No. G119304 signed sealed and dated by J.R. Eichelberger III and James P. Bauer) from Rock Engineering and Testing Laboratory Inc. The Geotechnical Report is a very important document in the early phase of the engineering process for a construction site of this magnitude. It is based on a subsurface investigation and laboratory testing of the various soils present at the site and it is required it be done to prepare/develop and recommend the foundation and pavement program for the site. The foregoing statement underscores the irony that SD is very serious in ensuring that all structures be erected on solid ground to protect its own assets and thus protect its own investments from erroneous and technically deficient engineering and scientific work, yet SD is not very much interested in protecting the environment and the ecosystems affected by this project, and is careless in what it submits to the TCEQ in association with this application, and the TCEQ (whether or not excused by rule or regulation) would be careless about the quality, the seriousness, and the

efficacy of the technical information tendered in this application, were the agency to accept this tender without a response requiring correction, supplementation, or refiling; and, as a matter of fact, recent decision from the TCEQ Commissioners pertaining to this site to stop the start of construction of the waste water plant, until the issues with the wastewater application be resolved suggests deficiencies and carelessness in the submission of this application.

2. **Regarding the various environmental programs affect by this project, The Applicant on attachment A-6 of the Core Data Form, page 2 item 39 only checked the box for wastewater. The Applicant omitted to check the boxes pertaining to the following** programs:
   a. Sludge
   b. Storm water
   c. Aquifer
   d. Emissions Inventory Air
   e. Water Rights and
   f. Industrial Hazardous Waste

In the ED Document on page 2 a declaration is made that sludges will be dried in filter presses and solids in the form of dry cakes will be produced and transported off-site, and that floating oils will be skimmed off the DAF unit and sent to the used oil tank for transport off-site. So why did the Applicant not mark the appropriate sludge and industrial hazardous waste categories and follow up with the requirements of these programs?

Storm water will be collected in three areas with surface areas, more than 800 acres having slag scrap metal and others. So why did the Applicant not mark the appropriate storm water category and follow up with the requirements of this program?

In the Application section where the existing water wells around the site are identified, the water wells produce from underground aquifers (depths indicated to be between 35 to 50 feet below ground level,) and the Chicot Aquifer is mentioned in one log at least, along with the possibility of other aquifers being present (The Evangeline Aquifer) underneath and around the site. Did the Applicant tried to locate aquifers around and underneath the site? So why did the Applicant not mark the appropriate aquifer category and follow up with the requirements of this program? Can the Applicant guarantee that its process will not contaminate and render useless the water table below or any of the aquifers present underneath and around the site?

The steel mill will operate blast furnaces including coke ovens in its process (technical section of the Application, page 1.) What will the emissions be (pollutants and their quantities) from these processes? So why did the Applicant not mark the appropriate emissions inventory air category and follow up with the requirements of this program?

The steel mill will supplement its freshwater requirements with fresh water from water wells. So why did the Applicant not mark the appropriate water rights category and follow up with the requirements of this program?

3. On the Supplemental Permit Application Form (SPIF) page 12 there is no indication by the Applicant when and if the following agencies were contacted:

a. Texas Historical Commission

b. Texas Parks and Wildlife
c. U.S. Fish and Wildlife
d. U.S. Army Corps of Engineers

At what point will TCEQ contact these agencies? It is imperative that they do this immediately and that they seek approval from these stakeholders since the TCEQ does not have the resources nor the expertise to deal with the toxicity issues and the impacts on wildlife (both aquatic, land and air) generated by substances generated from the steel mill process and the seventeen (17) chemical treatment products identified in the Application. Nor does it have the expertise that the Texas Historical Commission or the U.S. Army Corps of Engineers have.

4. In section 5 of the Technical Report the Applicant declares that it will be using cooling water with blowdowns in six (6) cooling towers with the blow downs as follows:
   Dly Avg gal/day Dly Max gal/day
   619,200 1,949,280
   This declaration then forces the applicant to address and answer questions in Section 12 of the Technical Report in which the Applicant is ambiguous and confusing in that by checking yes to 12(b) the Applicant declares that water will be supplied from groundwater sources, if so, is it from wells they will drill or from where? And what will the quantities be from this source(s) Then the Applicant in 12(c) also checks yes and so it declares that water will also be coming from a public water supplier if so, who is this supplier and what will the quantities be from this source? Then it declares that it will not obtain the water from an independent supplier. Where is the water coming from? **Clarifications are needed on these issues.**
5. If the daily average of the blow downs is 0.62 MGD and the daily maximum is 1.95 MGD as stated on the application why does the TCEQ Draft Permit have on its effluent limitations (outfall 001) a daily average of 1.56 MGD and a daily maximum of 3.0 MGD? The TCEQ ED and the Applicant need to answer the following questions:
   a. What are the differences; 0.94 MGD in the case of the average, and 1.05 MGD in the case of the maximum due to?
   b. Are there any other flows besides cooling tower blowdowns and how big are they?
   c. Will SD wastewater plant be a plant for hire?
   d. I.e., does SD intend to process wastewater besides their own generated wastewater for other entities or organizations?
   e. If so why and who are these other organizations and how much wastewater will be taken from these clients?
6. Then in section 12 of the Application why did the Applicant answer **No** to 12(d)(316)(b)(ii) instead of **Yes? Is the Cooling Water Intake Structure (CWIS) intake flow 5.5 MMGD or is it some other number? If so, what is the other number? And what is the quantity (actual volumetric flow) that will be used solely for cooling purposes? The cooling flow which would mostly be the make up water flow to the cooling towers, is at least 3.94 MGD but most likely more, maybe as much as 5.27 MGD which would correspond to at least 72 % or most likely 96 % of the total CWIS intake.** The quoted rule by the Applicant is 12(d)(316)(b)(ii) and it states "at least 25% of the total CWIS will be used exclusively for cooling purposes on an annual average basis. By answering **No the Applicant excludes himself from 12(d)(316)(F) and from regulation 40CFR 125.86 (b) the Applicant needs to properly answer this question and comply with this requirement.**

7. It is alarming and of great concern that The Applicant has not done and does not intend to do hydrological studies (required or not required by rule or law) surface and subsurface (above ground and below ground) on the site to determine the short- and long-term contamination of the soil and the water table. Likewise, very alarming and of great concern is the fact that the Applicant declares the construction and use of six (6) detention ponds, totaling 828 acres of surface area with **only** in-situ natural clay liners on five of these ponds and only one protective rubber liner (0.12 acres.) While it is understood that of all soils clay is the less permeable clay nevertheless is also permeable and has hydraulic conductivity. The Applicant has not conducted testing to determine the permeabilities of these clays on the footprints where these ponds are located nor has the Applicant conducted studies, done calculations, or modeling to determine how the detained water with its polluting constituents penetrate, transport, distribute itself, and contaminate or not contaminate the soil, the water table, or any aquifer located beneath these pond footprints.
8. The application declares that over 800 acres of area where slag, raw materials etc. will be stored in the open will be exposed to precipitation, the water from precipitation will then become polluted with chemical constituents contained by the stored metals and become part of the storm water that eventually would also be discharged to Chilitipin Creek. The effluent limitations for storm water proposed by the TCEQ ED on the draft permit limit themselves to basically only 4 items, do not include the metals inherent to the steel mill process, and do not even include flow limitations, making this permit deficient, inadequate, and spineless for a proposed project of this magnitude and complexity.
9. The Applicant declares that the wastewater treatment process will use 17 treatment chemical products to treat and adjust the water chemistry prior to discharging to the Creek. These treatment products according to their Safety Data Sheets (SDS's) contain other chemicals like phosphoric acid, sulfuric acid, petroleum products, bisulfites, glycol, nitrates and many others not identified due to their so called "proprietary nature" the large number of products and the nature of their constituents in itself is an indication of how "messed up" the generated process water will be, if it is going to take so many chemicals to remediate it and make it acceptable to meet the weak, deficient and spineless effluent limitations required by the TCEQ. Other issues of great concern arise when an industrial site of this magnitude handles, stores, and injects these chemicals to their manufacturing and wastewater treatment processes. And just to name a few of these concerns/issues:
    a. What are the quantities of these seventeen (17) chemical products that will be stored in the facility at any given time?
    b. How are these quantities of chemicals being stored and contained in case the primary or secondary containers (if any) would leak?
    c. If they leak, how will they be collected and how will the affected media be cleaned or remediated?
    d. How possibly could any TCEQ storm water or wastewater draft permit with what effluent limits regulate or enforce any action if leaks to the open environment or injection excursions into the process of any of these 17 chemicals were to occur?
10. The Applicant declares that there are sixteen (16) water wells on the site or near the site where this facility will be built. Has the Applicant done due diligence as follows:
    a. Will any of these 16 wells be contaminated by any the operating or maintenance activities once the facility begins operations?

b. Have the owners of these water wells been notified?

11. The TCEQ ED on page 2 of the Draft Permit of the Application declares, the generation and the transport off- site of solid dry cakes from filter presses... and floating oils from skimming processes, but the Applicant does not declare the quantities or where these solids will be disposed of. **The TCEQ needs to demand that these quantities be declared by the Applicant and that the destination sites be revealed to the public.**
12. The TCEQ draft permit is saturated throughout with flimsy statements that lack command and authority in what it should require from the Applicant. Some examples to mention a few are:
    a. Page 2 "The backwash from the polishing sand filter **may be routed** back to the EQ Tank" The draft permit should read "**must be routed.**"
    b. Page 2 "Domestic wastewater generated at the site **may be routed** to the domestic wastewater treatment package plant for biological treatment" here again the draft permit should read "**must be routed.**"

Encarnacion Serna (Chon)

Encarnacion Serna

105 Lost Creek Drive
Portland Texas 78374
(361-903-5774)

CC:

Mr. William Woody
Chief of Law Enforcement
United States Fish and Wildlife Service

Department of the Interior
US Fish and Wildlife Service
Texas Coastal Ecological Service Field Office

Department of the Interior
US Fish and Wildlife Service
Texas State Administrator

REVIEWED
MAR 2 9 2021
By
PM
H

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2021 MAR 25 AM 10:17
CHIEF CLERKS OFFICE

My name is Encarnacion Serna. My wife Rosa and I reside at 105 Lost Creek Drive in Portland, Texas. We have lived in this home since July 1991. My telephone number is 361- 903-5774.

I am requesting a Public Meeting and a Contested Case Hearing on WRPERM 13630. The applicant for this Permit is the Port of Corpus Christi Authority of Nueces County.

My property extends to the shores of Corpus Christi bay. The proposed intake structure is approximately 3250 feet from my property. The coordinates of the main desalination facility provided in the Water Rights Permit differs from the coordinates provided in the applicant's Wastewater Permit application. However, it appears the main facility will be located approximately 1 mile from my home.

I have direct access to the Bay from my home. I have fished these waters by wading, gigging and kayaking for years. My family and I consume the fish my children, grandchildren, in-laws, and I catch as the prices of fresh fish at the market are high and becoming unaffordable. These waters have been sources of recreation for years and have provided fish for my family. Now I have 10 grandchildren and in-laws and we all recreate in these waters.

This desalination facility and its bay water intake structure will interfere with the peaceful enjoyment of my home, and do away with a source of food for me and my entire family and must be denied.

I offer the following comments on the permit:

(a) lack of sufficient, meaningful technical content; and,
(b) deficiencies and inadequacies in providing necessary information to the Public and the Regulating Agency (TCEQ)

This water rights application is deficient and inadequate in its technical content, including but not limited to the areas listed below:

1. **Engineering Credentials**. This permit application submitted to the TCEQ in August of 2019 by the Port was not signed, sealed, and dated by a Registered Professional Engineer Licensed to Practice in The State of Texas. Please note that the Port in a recent request (January 19, 2021) to Parsons Environment and Infrastructure Group, pertaining to this same project, directs that "Engineering designs, reports, drawings, and specifications prepared hereunder will be sealed by a Registered Professional Engineer Licensed to Practice in the State of Texas in accordance with applicable...." The foregoing statement underscores the irony that the Port is very serious in protecting its own organization from erroneous and technically deficient engineering and scientific work, yet the Port is careless in what it submits to the TCEQ in association with this application, and the TCEQ (whether or not excused by rule) would be careless about the quality, the seriousness, and the efficacy of the technical information tendered in this application, were the agency to accept the tender without a response requiring correction, supplementation, or refiling; and, as a matter of fact, recent decision from the State's administrative hearings arm, pertaining to Harbor Island, suggests opportunity for similar carelessness in its management of all the other applications

submitted to the TCEQ for all the South Texas desalination projects that are being currently proposed. TCEQ has opportunity to reverse that apparent trend in its management and response to the instant permit application.

2. **Reliance on Discredited Waste Water Application**. In the Basis of Design Document (BOD) Page 1 section 1, submitted by Wood to the Port and subsequently by the Port Authority to the TCEQ, Wood states, "Wood (formerly Amec Foster Wheeler, the Port's Engineering Consultant) on behalf of the Port, has already developed and submitted to the TCEQ an Industrial Waste Water Permit Application that fully documents the process to convert sea water to industrial water. This information will not be repeated in this document." While it is true that Wood did submit such Waste Water Permit Application, it is not true that such other application fully documents the process. The waste water discharge application for that referenced project is also deficient and inadequate in its technical content.
3. **Misplaced Intake. Current.** In section 3 (Site Selection) of the same document, Wood states they located the intake point southwest of the desalination plant(s) and other waste water discharge points away from already existing industry to avoid contamination of intake from these other discharges and to avoid recirculation of other desalination discharges; yet, there is a significantly strong current or circulation from N.E. to S.W. in La Quinta Channel that will make it impossible to avoid contamination. This current becomes extremely strong and violent during the surges created by tropical storms and hurricanes as observed during hurricanes Harvey and Hanna.
4. **Unaccounted for Channeling Impacts.** Subsequently, in section 3 (Site Selection) of the same document, Wood mentions that dredging a huge ditch (200 ft. by 200 ft. 10 ft.) will be required to accommodate the large screens to be installed on the inlet of the two intake pipes. Here Wood/the Port, fail *again* to study the impact of this dredging on the hydrodynamic conditions of the bay, and fail to determine whether or not any subsidence with adverse effects to shoreline structures and houses would take place as a result of this substantial and unnatural hole. On its face, this proposed excavation is poised to hold portent under ambient conditions and during storm surge.
5. **Misanalysis of Current Flow. Understatement of Discharge Flow.** In section 4 (Area of Influence) of the same document, Wood states, "The source water body, the Corpus Christi Bay is tidal." This is true, but only partially; because there is also a fairly strong current in this Bay that flows and carries water from the Northeast to the Southwest. This current starts in Port Aransas, flowing through the Ship Channel and through La Quinta Channel and the Bay itself, as far south as Sunset Lake and Indian Point Pier. This current is very evident in areas of the Northshore and Portland shores, where people kayak, "wade fish," and swim, often times being pulled in a southwest direction. This current or water flow becomes extremely strong and large during storm surges as evidenced during hurricanes Harvey and Hanna. Among the flotsam, you could then see buoys, broken boats, wood, all kind of materials and floating trash moving fast from La Quinta Channel to Indian Point Pier. Further along in this section of the application

Wood/the Port contradict themselves by stating, "At the La Quinta Channel, near the Ingleside Station, which is the nearest La Quinta location, during monitoring periods in May 2000, the observed discharge through the ship Channel was approximately 10,000 cub [sic] feet per second (cfs)." This flow, converted to different units, translates to 4,488,312 gallons per minute. It is significant that this Bay system is a semi-closed system (almost totally closed by separation or isolation of the Bay from the Gulf by a series of elongated sand [barrier] islands.) This flow or current is the result of or caused by the Gulf's equalizing levels with the Bay as water is lost from the system by evaporation due to temperature variations both seasonal and permanent. **This discharge outflow or flow from the ship channel will increase by 70 MGD (48,576 gal/min), a 1.1 % increase and not a 0.5% increase as claimed in the technical section of this application. The Port's application fails here to include the 40 MGD net volume of brine also being mined by the City's desalination plant proposal. And Wood/the Port fail *again* in claiming that the movement in the Bay is only tidal.**

6. **Conflicting Hydrodynamic Statements.** In opening statements in section 4 (Area of Influence), the Wood says on behalf of the applicant, "The ship channel and the adjacent BU Site 6 and dredge material placement area (DMPA) 13 have altered the local hydrodynamic condition in the area. However, the features have been determined to have an insignificant impact on the water flow, exchange, and salinity (HDR 2012.)" In the following paragraph they declare, "Information to characterize the hydrodynamic conditions of this area of the Corpus Christi Bay is limited." Previously, Wood acknowledged that there is a flow or discharge of approximately 10,000 cubic feet per second. **This is a significant fact statement. How then can Wood/the Port conclude that the change in the hydrodynamic condition has an insignificant impact when they concurrently acknowledge that it has been altered; further acknowledging that information is limited; failing to include the existing natural flow/current; and also failing to include the current adjustment that will be necessary with the mining of a net amount of 70 MGD from two desalination plants? Clearly, Wood's conclusion of insignificant impact reflects absence of empirical reasoning and lacks credulity.**
7. **Unsubstantiated Velocity.** Later in the same section, section 4 of the application, Wood/the Port engage in a discussion, at best unintelligible, at worst misleading, to **emphasize without scientific proof, and without any shown or provided calculations, an assertion that any and every velocity, near or in the vicinity of, and right at the screen /mesh entrance to the intake pipe will be less than 0.5 ft/sec.** This is a totally unsubstantiated assertion, defying common reason.
8. **Secondary Screen Omissions.** In section 5 (Intake Structure), Wood/the Port again attempt to emphasize an inlet velocity of less than 0.5 ft/sec, without providing calculations; and, in describing the inlet screen, fail to provide clarification of secondary screens location within the inlet pipes; further failing to disclose opening size of the numerous holes to be designed into the secondary screen.

9. **Inapplicable Cooling Water Standard. Deflection.** In section 6 (Fish Protection Standards) Wood/the Port write, "Establishing fish protection standards for the proposed intake structure should be a high priority early in the permitting design process." Yet Wood/the Port does not commit clearly, much less unequivocally, what this standard would be but instead "skirts the issue" by quoting and deflecting to a standard from the Clean Water Act which is not for desalination plant intake structures, but rather applies to cooling water structures.
10. **Screen Protections Non-Existent for Marine Organisms. Process Impacts. Mortality Questions Unanswered.** Later in section 6 (Fish Protection Standards), Wood/the Port write, "The proposed mesh screen size is ¼ by ¼ inch square for a percent open area of approximately 64%. Actual percent open area and screen efficiency is dependent on manufacturer and should be vetted during final design. *Screen efficiency* will be maintained using a compressed air system to periodically clear the screen." This declaration raises more questions than it answers:
    a. Which screens are ¼ by ¼ inch square for a percent open area of approximately 64%? The primary, the secondary, or both?
    b. What exactly is "open area," and 64% of what?
    c. If the actual efficiency is not yet known and will be dependent on whatever screens will be purchased in the future, the specifications yet to be determined, why then does Wood/the Port say earlier in this application that *fish* protection should be of high priority and standards should be established earlier in the design process? Significance: Protection must go to marine organisms, not just a general category referred to as "fish." **Organism protection is lacking in the application.** "Fish" protection should include all sizes of *flora and fauna*, vulnerable to the intake on account of measurement, including but not limited to: young Brown Bay Shrimp, measuring less than a quarter inch, and other small stage crustaceans in the food chain. Tiny juvenile fish and developing shrimp are, on the face of their sizes, vulnerable to passing through the proposed ¼ inch square openings. **Seagrasses reproduce sexually. No provision is made for protection** of male pollen that can measure up to 5mm, ideally sized to be sucked into intake.
    d. The compressed air system mentioned here should be described and explained. What will the air pressure be? What will the organism mortality rate be as living organisms get hit by pressurized air?
    e. Has **strategic sampling** been done **to identify** all marine organisms and size distribution of **all these living animals and plants that** will be attracted to the screens; will hit the screens (both primary and secondary); **will die or survive being entrained** in the primary screens; that will **filter through secondary screening**, later to die further in the intake pipe in pump impeller volutes and tanks? The **application provides no insight into strategic sampling to demonstrate organism protection /survival.**

f. **What will be the forces, expressed as Lbf/in$_2$, not velocities,** with which these living organisms hit the screens, the inner walls of the intake pipes, and other intake equipment? The forces in question are the forces to be created by velocities due to lift/suction actions created by the intake pumps and the velocities of the marine currents. The **application goes to great lengths asserting that all velocities outside of the screen would be less than 0.5 ft/ sec.[unsubstantiated]**. Yet it cannot be denied, as conceded by Wood/the Port themselves, that once **inside the pipe the velocities** would **increase dramatically to 5-6 ft/sec in the suction pipes** of the intake pumps, **and** increase to **6-9 ft/sec inside the pump discharge** pipes. ***And again, more questions emerge than are answered*** pertaining to what is really significant and should be of utmost importance to make known **to the TCEQ, Public, and the Texas Parks and Wildlife Department.**

What will the marine organism mortality rates be in the following places?

- On surfaces of both sets of screens.
- On inner walls of pipes.
- Inside other equipment like pumps, tanks, valve internals, etc.

11. **Mis-statement of Marine Organism Protection Obligation. Protection Avoidance.** At the end of Section 6, Woods/the Port acknowledge entrainment will occur, but dismisses they have obligation to mitigate marine organism mortality because their intake flow is less than 125 MGD, here again an applicant using some obscure, inapplicable rule that has nothing to do with permit obligations to protect marine life. Unfortunately, this permit application is crafted to allow the applicant a "cop out" **to avoid otherwise prudent and regulatorily sound obligations to protect marine life.**
12. **Cumulative Effects.** This license application, like all other applications for proposed desalination projects, presents a huge problem of omission and distortion in the evaluation and review of impacts and degradations these projects will create, if implemented. One reason is that effects are being reviewed in isolation from one another, **irrespective of cumulative impacts.** A silo scheme prevails to prevent communication among evaluators. The reviewers of the water rights applications are not the same as the reviewers of the waste water discharge applications. Most likely they do not talk to each other. Aside from the silo notion, the **review landscape is further complicated by acts of the City of Corpus Christi.** The City, too, is submitting its own applications for its own desalination plants. **The cumulative or aggregate effects from both the City and the Port projects are not being jointly considered**. The right hand is not informed of what the left hand is doing. Therefore, neither regulatory hand has an empirical handle on the outcome of their respective technical reviews. In the meantime, ambitious applicants race to deplete limited natural resources as if there were a gold rush in a zero-sum game to consume the natural environment and its marine life. Among the "review silos," there is no regulatory avenue to forecast how much degradation will ensue.

13. **Engineering Conundrums. Cynical Promotion of Screening.** After reading sections 4 through 6 of the application, my engineer's head does ache at trying to reconcile omissions and misrepresentations in the application, distortions that can best be described as window dressing to create a façade of compliance. **One mischaracterization**, however, **cannot be treated as window dressing. That is the cynical promotion of the inlet screens** as a "Harry Potter Magic Wand" **to purportedly prevent marine life from dying or getting injured**. In truth, the intake structures are plainly designed for benefit of the plant, to prevent plugging of the pipes and other equipment, to prevent internal damage of pipes and equipment, and to minimize or eliminate plant operation downtime. **Protection of marine life and protection of process equipment are mutually exclusive tasks for which this application presents no solution**.
14. **Extraordinary Energy Consumption Questions.** The proposed intake flow for this project is gargantuan, 90.4 MGD, (and the City's proposed intake is even bigger, 110.7 MGD) and the pressures to be overcome by these flows would also be gigantic. Not yet disclosed to the Public, to the TCEQ, and other stakeholders is the extraordinary amount of electrical energy usage this desalination plant will require. The huge volume of saline water to be lifted from the Corpus Christi Bay, to be pushed through a multitude of pipes and other equipment in the intake system, through the pre-treatment system, through the reverse osmosis membranes (with its out-of-the-ordinary osmotic pressure to be overcome), through the permeate/product distribution system; and, finally the high salinity discharge waste/retentate back to the bay, would all require enormous, out-of-the ordinary electric motors having big horsepower requirements, that could range in size from 5,000 to 25,000 Hp, and correspondingly large magnitudes of electrical energy consumption. These needs beg the questions:
    a. **Have calculations been made to determine pump/pump driver sizes?**
    a. **How will the power be generated?**
    b. **Who will generate it?**
    c. **Who will pay for it?**
    d. **How will it be paid for?**
    e. **Will the power be generated with nuclear energy, a suite of alternative sources, or fossil fuel?**
    f. **How much more air and water pollution will be produced by the generator/supplier?**

Conclusions:

This application should be denied/withdrawn immediately due to its lack of sufficient, meaningful technical content and because of its deficiencies and inadequacies in providing necessary information to the Public and the Regulating Agency (TCEQ) to determine adverse impacts this project would have on the ecological systems of Corpus Christi Bay and the socio-economic impact it would have on affected tax paying citizens.

This application should be denied/ withdrawn immediately due to its lack of efficacy in meeting requirements of the US Fish and Wildlife Service, whose regulatory obligations are owed to the United States of America on account of this project's being proposed within jurisdictional waters of the United States.

Respectfully:

Encarnacion Serna

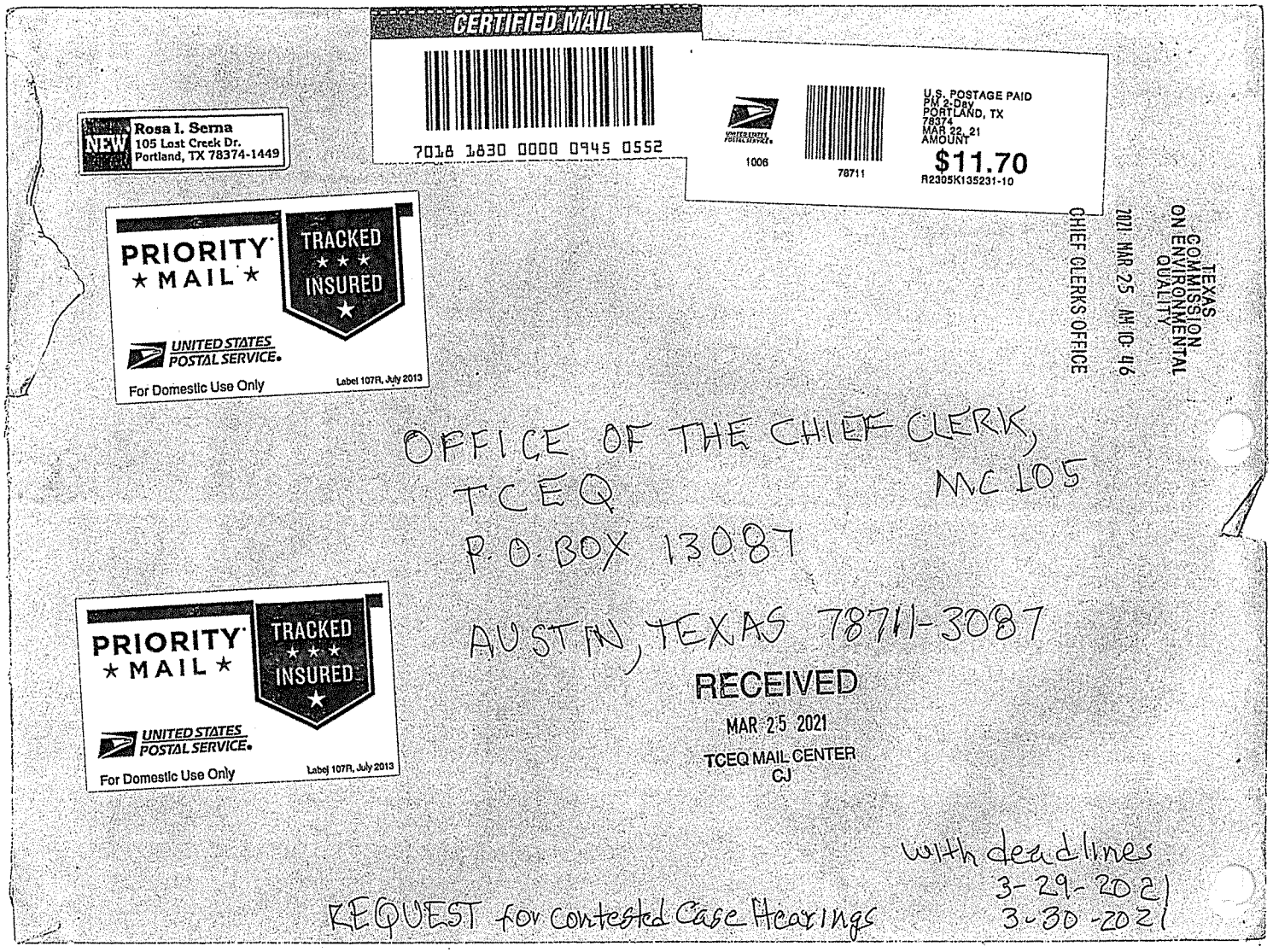
105 Lost Creek Drive
Portland Texas 78374
(361-903-5774)

CC:

Mr. William Woody
Chief of Law Enforcement
United States Fish and Wildlife Service

Department of the Interior
US Fish and Wildlife Service
Texas Coastal Ecological Service Field Office

Department of the Interior
US Fish and Wildlife Service
Texas State Administrator



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CJ

REQUEST for Contested Case Hearings

with deadlines
3-29-2021
3-30-2021

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Wednesday, February 24, 2021 11:18 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630
Attachments: CAPE Chon's La Quinta Channel Water Rights Permit Final3-2 -1.docx

eComment - PM and H

Attachment - PM and H

From: cacheton1@twc.com <cacheton1@twc.com>
Sent: Tuesday, February 23, 2021 5:56 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Encarnacion Serna

E-MAIL: cacheton1@twc.com

COMPANY:

ADDRESS: 105 LOST CREEK DR
PORTLAND TX 78374-1449

PHONE: 3619035774

FAX:

COMMENTS: I am requesting a Public Meeting and a Contested Case Hearing on this permit. Please see the attached document.

My name is Encarnacion Serna. My wife Rosa and I reside at 105 Lost Creek Drive in Portland, Texas. We have lived in this home since July 1991. My telephone number is 361- 903-5774.

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1. **Engineering Credentials.** This permit application submitted to the TCEQ in August of 2019 by the Port was not signed, sealed, and dated by a Registered Professional Engineer Licensed to Practice in The State of Texas. Please note that the Port in a recent request (January 19, 2021) to Parsons Environment and Infrastructure Group, pertaining to this same project, directs that "Engineering designs, reports, drawings, and specifications prepared hereunder will be sealed by a Registered Professional Engineer Licensed to Practice in the State of Texas in accordance with applicable...." The foregoing statement underscores the irony that the Port is very serious in protecting its own organization from erroneous and technically deficient engineering and scientific work, yet the Port is careless in what it submits to the TCEQ in association with this application, and the TCEQ (whether or not excused by rule) would be careless about the quality, the seriousness, and the efficacy of the technical information tendered in this application, were the agency to accept the tender without a response requiring correction, supplementation, or refiling; and, as a matter of fact, recent decision from the State's administrative hearings arm, pertaining to Harbor Island, suggests opportunity for similar carelessness in its management of all the other applications

submitted to the TCEQ for all the South Texas desalination projects that are being currently proposed. TCEQ has opportunity to reverse that apparent trend in its management and response to the instant permit application.

2. **Reliance on Discredited Waste Water Application**. In the Basis of Design Document (BOD) Page 1 section 1, submitted by Wood to the Port and subsequently by the Port Authority to the TCEQ, Wood states, "Wood (formerly Amec Foster Wheeler, the Port's Engineering Consultant) on behalf of the Port, has already developed and submitted to the TCEQ an Industrial Waste Water Permit Application that fully documents the process to convert sea water to industrial water. This information will not be repeated in this document." While it is true that Wood did submit such Waste Water Permit Application, it is not true that such other application fully documents the process. The waste water discharge application for that referenced project is also deficient and inadequate in its technical content.
3. **Misplaced Intake. Current.** In section 3 (Site Selection) of the same document, Wood states they located the intake point southwest of the desalination plant(s) and other waste water discharge points away from already existing industry to avoid contamination of intake from these other discharges and to avoid recirculation of other desalination discharges; yet, there is a significantly strong current or circulation from N.E. to S.W. in La Quinta Channel that will make it impossible to avoid contamination. This current becomes extremely strong and violent during the surges created by tropical storms and hurricanes as observed during hurricanes Harvey and Hanna.
4. **Unaccounted for Channeling Impacts.** Subsequently, in section 3 (Site Selection) of the same document, Wood mentions that dredging a huge ditch (200 ft. by 200 ft. 10 ft.) will be required to accommodate the large screens to be installed on the inlet of the two intake pipes. Here Wood/the Port, fail *again* to study the impact of this dredging on the hydrodynamic conditions of the bay, and fail to determine whether or not any subsidence with adverse effects to shoreline structures and houses would take place as a result of this substantial and unnatural hole. On its face, this proposed excavation is poised to hold portent under ambient conditions and during storm surge.
5. **Misanalysis of Current Flow. Understatement of Discharge Flow.** In section 4 (Area of Influence) of the same document, Wood states, "The source water body, the Corpus Christi Bay is tidal." This is true, but only partially; because there is also a fairly strong current in this Bay that flows and carries water from the Northeast to the Southwest. This current starts in Port Aransas, flowing through the Ship Channel and through La Quinta Channel and the Bay itself, as far south as Sunset Lake and Indian Point Pier. This current is very evident in areas of the Northshore and Portland shores, where people kayak, "wade fish," and swim, often times being pulled in a southwest direction. This current or water flow becomes extremely strong and large during storm surges as evidenced during hurricanes Harvey and Hanna. Among the flotsam, you could then see buoys, broken boats, wood, all kind of materials and floating trash moving fast from La Quinta Channel to Indian Point Pier. Further along in this section of the application

Wood/the Port contradict themselves by stating, "At the La Quinta Channel, near the Ingleside Station, which is the nearest La Quinta location, during monitoring periods in May 2000, the observed discharge through the ship Channel was approximately 10,000 cub [sic] feet per second (cfs)." This flow, converted to different units, translates to 4,488,312 gallons per minute. It is significant that this Bay system is a semi-closed system (almost totally closed by separation or isolation of the Bay from the Gulf by a series of elongated sand [barrier] islands.) This flow or current is the result of or caused by the Gulf's equalizing levels with the Bay as water is lost from the system by evaporation due to temperature variations both seasonal and permanent. **This discharge outflow or flow from the ship channel will increase by 70 MGD (48,576 gal/min), a 1.1 % increase and not a 0.5% increase as claimed in the technical section of this application. The Port's application fails here to include the 40 MGD net volume of brine also being mined by the City's desalination plant proposal. And Wood/the Port fail *again* in claiming that the movement in the Bay is only tidal.**

6. **Conflicting Hydrodynamic Statements.** In opening statements in section 4 (Area of Influence), the Wood says on behalf of the applicant, "The ship channel and the adjacent BU Site 6 and dredge material placement area (DMPA) 13 have altered the local hydrodynamic condition in the area. However, the features have been determined to have an insignificant impact on the water flow, exchange, and salinity (HDR 2012.)" In the following paragraph they declare, "Information to characterize the hydrodynamic conditions of this area of the Corpus Christi Bay is limited." Previously, Wood acknowledged that there is a flow or discharge of approximately 10,000 cubic feet per second. **This is a significant fact statement. How then can Wood/the Port conclude that the change in the hydrodynamic condition has an insignificant impact when they concurrently acknowledge that it has been altered; further acknowledging that information is limited; failing to include the existing natural flow/current; and also failing to include the current adjustment that will be necessary with the mining of a net amount of 70 MGD from two desalination plants? Clearly, Wood's conclusion of insignificant impact reflects absence of empirical reasoning and lacks credulity.**
7. **Unsubstantiated Velocity.** Later in the same section, section 4 of the application, Wood/the Port engage in a discussion, at best unintelligible, at worst misleading, to **emphasize without scientific proof, and without any shown or provided calculations, an assertion that any and every velocity, near or in the vicinity of, and right at the screen /mesh entrance to the intake pipe will be less than 0.5 ft/sec.** This is a totally unsubstantiated assertion, defying common reason.
8. **Secondary Screen Omissions.** In section 5 (Intake Structure), Wood/the Port again attempt to emphasize an inlet velocity of less than 0.5 ft/sec, without providing calculations; and, in describing the inlet screen, fail to provide clarification of secondary screens location within the inlet pipes; further failing to disclose opening size of the numerous holes to be designed into the secondary screen.

9. **Inapplicable Cooling Water Standard. Deflection.** In section 6 (Fish Protection Standards) Wood/the Port write, "Establishing fish protection standards for the proposed intake structure should be a high priority early in the permitting design process." Yet Wood/the Port does not commit clearly, much less unequivocally, what this standard would be but instead "skirts the issue" by quoting and deflecting to a standard from the Clean Water Act which is not for desalination plant intake structures, but rather applies to cooling water structures.
10. **Screen Protections Non-Existent for Marine Organisms. Process Impacts. Mortality Questions Unanswered.** Later in section 6 (Fish Protection Standards), Wood/the Port write, "The proposed mesh screen size is ¼ by ¼ inch square for a percent open area of approximately 64%. Actual percent open area and screen efficiency is dependent on manufacturer and should be vetted during final design. *Screen efficiency* will be maintained using a compressed air system to periodically clear the screen." This declaration raises more questions than it answers:
    a. Which screens are ¼ by ¼ inch square for a percent open area of approximately 64%? The primary, the secondary, or both?
    b. What exactly is "open area," and 64% of what?
    c. If the actual efficiency is not yet known and will be dependent on whatever screens will be purchased in the future, the specifications yet to be determined, why then does Wood/the Port say earlier in this application that *fish* protection should be of high priority and standards should be established earlier in the design process? Significance: Protection must go to marine organisms, not just a general category referred to as "fish." **Organism protection is lacking in the application**. "Fish" protection should include all sizes of *flora and fauna*, vulnerable to the intake on account of measurement, including but not limited to: young Brown Bay Shrimp, measuring less than a quarter inch, and other small stage crustaceans in the food chain. Tiny juvenile fish and developing shrimp are, on the face of their sizes, vulnerable to passing through the proposed ¼ inch square openings. **Seagrasses reproduce sexually. No provision is made for protection** of male pollen that can measure up to 5mm, ideally sized to be sucked into intake.
    d. The compressed air system mentioned here should be described and explained. What will the air pressure be? What will the organism mortality rate be as living organisms get hit by pressurized air?
    e. Has **strategic sampling** been done **to identify** all marine organisms and size distribution of **all these living animals and plants that** will be attracted to the screens; will hit the screens (both primary and secondary); **will die or survive being entrained** in the primary screens; that will **filter through secondary screening**, later to die further in the intake pipe in pump impeller volutes and tanks? The **application provides no insight into strategic sampling to demonstrate organism protection /survival.**

f. **<u>What will be the forces, expressed as Lbf/in$_2$, not velocities,</u>** with which these living organisms hit the screens, the inner walls of the intake pipes, and other intake equipment? The forces in question are the forces to be created by velocities due to lift/suction actions created by the intake pumps and the velocities of the marine currents. The **application goes to great lengths asserting that all velocities outside of the screen would be less than 0.5 ft/ sec.[unsubstantiated]**. Yet it cannot be denied, as conceded by Wood/the Port themselves, that once **inside the pipe the velocities** would **increase dramatically to 5-6 ft/sec in the suction pipes** of the intake pumps, **and** increase to **6-9 ft/sec inside the pump discharge** pipes. ***And again, more questions emerge than are answered*** pertaining to what is really significant and should be of utmost importance to make known **to the TCEQ, Public, and the Texas Parks and Wildlife Department.**

<u>What will the marine organism mortality rates be in the following places?</u>

- On surfaces of both sets of screens.
- On inner walls of pipes.
- Inside other equipment like pumps, tanks, valve internals, etc.

11. **Mis-statement of Marine Organism Protection Obligation. Protection Avoidance.** At the end of Section 6, Woods/the Port acknowledge entrainment will occur, but dismisses they have obligation to mitigate marine organism mortality because their intake flow is less than 125 MGD, here again an applicant using some obscure, inapplicable rule that has nothing to do with permit obligations to protect marine life. Unfortunately, this permit application is crafted to allow the applicant a "cop out" **to avoid otherwise prudent and regulatorily sound obligations to protect-marine life.**
12. **Cumulative Effects.** This license application, like all other applications for proposed desalination projects, presents a huge problem of omission and distortion in the evaluation and review of impacts and degradations these projects will create, if implemented. One reason is that effects are being reviewed in isolation from one another, **irrespective of cumulative impacts.** A silo scheme prevails to prevent communication among evaluators. The reviewers of the water rights applications are not the same as the reviewers of the waste water discharge applications. Most likely they do not talk to each other. Aside from the silo notion, the **review landscape is further complicated by acts of the City of Corpus Christi.** The City, too, is submitting its own applications for its own desalination plants. **The cumulative or aggregate effects from both the City and the Port projects are not being jointly considered.** The right hand is not informed of what the left hand is doing. Therefore, neither regulatory hand has an empirical handle on the outcome of their respective technical reviews. In the meantime, ambitious applicants race to deplete limited natural resources as if there were a gold rush in a zero-sum game to consume the natural environment and its marine life. Among the "review silos," there is no regulatory avenue to forecast how much degradation will ensue.

13. **Engineering Conundrums. Cynical Promotion of Screening.** After reading sections 4 through 6 of the application, my engineer's head does ache at trying to reconcile omissions and misrepresentations in the application, distortions that can best be described as window dressing to create a façade of compliance. **One mischaracterization**, however, **cannot be treated as window dressing. That is the cynical promotion of the inlet screens** as a "Harry Potter Magic Wand" **to purportedly prevent marine life from dying or getting injured.** In truth, the intake structures are plainly designed for benefit of the plant, to prevent plugging of the pipes and other equipment, to prevent internal damage of pipes and equipment, and to minimize or eliminate plant operation downtime. **Protection of marine life and protection of process equipment are mutually exclusive tasks for which this application presents no solution.**
14. **Extraordinary Energy Consumption Questions.** The proposed intake flow for this project is gargantuan, 90.4 MGD, (and the City's proposed intake is even bigger, 110.7 MGD) and the pressures to be overcome by these flows would also be gigantic. Not yet disclosed to the Public, to the TCEQ, and other stakeholders is the extraordinary amount of electrical energy usage this desalination plant will require. The huge volume of saline water to be lifted from the Corpus Christi Bay, to be pushed through a multitude of pipes and other equipment in the intake system, through the pre-treatment system, through the reverse osmosis membranes (with its out-of-the-ordinary osmotic pressure to be overcome), through the permeate/product distribution system; and, finally the high salinity discharge waste/retentate back to the bay, would all require enormous, out-of-the ordinary electric motors having big horsepower requirements, that could range in size from 5,000 to 25,000 Hp, and correspondingly large magnitudes of electrical energy consumption. These needs beg the questions:
    a. Have calculations been made to determine pump/pump driver sizes?
    a. How will the power be generated?
    b. Who will generate it?
    c. Who will pay for it?
    d. How will it be paid for?
    e. Will the power be generated with nuclear energy, a suite of alternative sources, or fossil fuel?
    f. How much more air and water pollution will be produced by the generator/supplier?

Conclusions:

This application should be denied/withdrawn immediately due to its lack of sufficient, meaningful technical content and because of its deficiencies and inadequacies in providing necessary information to the Public and the Regulating Agency (TCEQ) to determine adverse impacts this project would have on the ecological systems of Corpus Christi Bay and the socio-economic impact it would have on affected tax paying citizens.

This application should be denied/ withdrawn immediately due to its lack of efficacy in meeting requirements of the US Fish and Wildlife Service, whose regulatory obligations are owed to the United States of America on account of this project's being proposed within jurisdictional waters of the United States.

Respectfully:

Encarnacion Serna

105 Lost Creek Drive
Portland Texas 78374
(361-903-5774)

CC:

Mr. William Woody
Chief of Law Enforcement
United States Fish and Wildlife Service

Department of the Interior
US Fish and Wildlife Service
Texas Coastal Ecological Service Field Office

Department of the Interior
US Fish and Wildlife Service
Texas State Administrator

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, July 20, 2020 8:45 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

H

From: cacheton1@twc.com <cacheton1@twc.com>
Sent: Thursday, July 16, 2020 2:17 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Encarnacion Serna

E-MAIL: cacheton1@twc.com

COMPANY:

ADDRESS: 105 LOST CREEK DR
PORTLAND TX 78374-1449

PHONE: 3619035774

FAX:

COMMENTS: I request an open hearing with the TCEQ and all stakeholders present sometime after the pandemic is gone and things go back to normal (Not a virtual conference on a computer screen or smart phone.)

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Thursday, July 2, 2020 8:19 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WQ; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WQ0005254000

PM
H
+associate to WRPERM 13630

From: cacheton1@twc.com <cacheton1@twc.com>
Sent: Wednesday, July 1, 2020 11:47 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WQ0005254000

REGULATED ENTY NAME LA QUINTA PROPERTY

RN NUMBER: RN102887460

PERMIT NUMBER: WQ0005254000

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Encarnacion Serna

E-MAIL: cacheton1@twc.com

COMPANY: Self

ADDRESS: 105 LOST CREEK DR
PORTLAND TX 78374-1449

PHONE: 3619035774

FAX:

COMMENTS: The TCEQ and the Port of Corpus Christi need to be transparent during this process. They need to conduct Public meetings/hearings pertaining to this permit application and also on the corresponding water rights permit application WRPERM 13630 to explain to the Public Clearly and thoroughly how this desalination project will impact and

pollute the La Quinta Channel and Corpus Christi Bays. They need to do this before start pushing heavily for the fast tracking and approval of these permits.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Thursday, July 2, 2020 8:30 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WQ; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WQ0005254000

PM
H
+associate to WRPERM 13630

From: cacheton1@twc.com <cacheton1@twc.com>
Sent: Wednesday, July 1, 2020 7:41 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WQ0005254000

REGULATED ENTY NAME LA QUINTA PROPERTY

RN NUMBER: RN102887460

PERMIT NUMBER: WQ0005254000

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: MR Encarnacion Serna

E-MAIL: cacheton1@twc.com

COMPANY: Self

ADDRESS: 105 Lost Creek Drive
Portland TX 78374

PHONE: 3619035774

FAX:

COMMENTS: The Port of Corpus Christi along with the TCEQ should be transparent and open and conduct open meetings/hearings with all people of the Coastal Bend directly or indirectly affected by these desalination projects to discuss with the Public the nature of these desalination plants and the impact they will have on the tax paying citizens

and the non tax paying individual and everybody else that depends on the La Quinta Channel, the Corpus Christi Bay and the other bodies of water for a living. In these open meetings/hearings they need to explain the reverse osmosis process clearly and in detail, they need to provide the material balances on these processes that identify and characterize all streams that will enter and leave these processes/plants. They need to identify all the components in the streams, show the exact chemical composition and ultimate disposition of the various created streams including chemicals to be injected to the required pre-treatment processes. They also need to do likewise on permit WRPERM 13630. The Port and TCEQ need to do this prior to forcing and fast tracking permit applications on the Public especially in these current times when people have limited means and venues due to the pandemic to participate fully in these processes and for the Public to really be able to see how these desalination projects will pollute and endanger the ecosystems and the water quality of these water bodies that are so useful and precious to our communities.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 29, 2021 12:57 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: gary@feralgeek.com <gary@feralgeek.com>
Sent: Friday, March 26, 2021 4:49 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Gary Strickland

E-MAIL: gary@feralgeek.com

COMPANY:

ADDRESS: 84 BAYSHORE DR Unit G
INGLESIDE TX 78362-4872

PHONE: 2817281108

FAX:

COMMENTS: My name is Gary Strickland. I live at 84 Bayshore in Ingleside on the Bay. I oppose the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel (permit WRPERM 13630). I am not convinced that there will not be potential harm to marine life. I am also concerned about where the concentrate will

eventually go that this water rights permit necessitates. I own a boat and dock it at the Bahia Marina. I like to go fishing and boating and do not want the water quality to deteriorate. Therefore, I request that a public meeting be held for the community to express their concerns and a contested case hearing. Thank you.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Monday, March 29, 2021 1:31 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630
Attachments: 1 - my written comments to TCEQ.pdf

H

From: summerline@verizon.net <summerline@verizon.net>
Sent: Saturday, March 27, 2021 5:20 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Errol Alvie Summerlin

E-MAIL: summerline@verizon.net

COMPANY:

ADDRESS: 1017 DIOMEDE ST
PORTLAND TX 78374-1914

PHONE: 3619605313

FAX:

COMMENTS: Please see attached Comments and Request for a Contested Case Hearing.

Errol A. Summerlin
1017 Diomede
Portland, Tx. 78374
(361) 960-5313

Texas Commission on Environmental Quality
Office of the Chief Clerk
MC-105
P.O. Box 13087
Austin, Texas 78711-3087

March 27, 2021

Re: COMMENTS
Proposed Water Rights Permit Number WRPERM 13630
Applicant: Port of Corpus Christi

Dear Sir/Madam:

I have lived in Portland for 37 years. While my home is slightly over 2 miles from the proposed location of the diversion, I live approximately 4,000 feet from the entrance to Sunset Lake Park. I have fished and crabbed for many years along the shorelines on Corpus Christi Bay. I was walking and using the waters off Sunset Lake Park long before it was a City Park and was an ardent supporter of development of the Park and Indian Point after the pier suffered hurricane damage. I am an avid birder and visit the Park frequently to enjoy the abundance of wildlife. I am a member of Portland Citizens United, the Coastal Alliance to Protect our Environment (CAPE) and Ingleside on the Bay Coastal Watch Association. This letter is written to provide Comments regarding the above-referenced permit application, and I specifically Request a Contested Case Hearing on this Permit.

From the outset, I urge the TCEQ to Deny the Issuance of this Permit and submit the following in support of this Request:

The Applicant has made it clear in their application and in Public forums that it has no intention of building the facility; no intention of operating the facility; and no intention of being a wholesale provider of water. Further, they have no idea whatsoever what entity would do so. The City of Corpus Christi is the authorized manager of the regional water supply for seven counties and has no interest in having any Permit that may be issued to the Applicant be transferred to it. The San Patricio County Municipal Water District will not build or operate the facility. Yet, if granted, this Permit would be issued to the Applicant in perpetuity. This is nothing more than speculative permitting by the Applicant and such speculative permitting should not be tolerated by the TCEQ.

The facility will require massive amounts of energy to operate, further exacerbating air quality and greenhouse gas emissions.

The designated uses of Segment 2481 include recreational contact, oyster waters and exceptional aquatic life. 2481 is also designated as an Essential Fish Habitat that includes a number of EFH species. Species in the Segment include Lightning Whelk, Blue Crab, Stone Crab, Fiddler Crab, American Alligator, oysters, red drum, spotted seatrout, black drum, striped mullet, southern flounder, hardhead catfish, bottlenose dolphins, pinfish, pigfish, silver perch, smooth puffer, sand seatrout, and numerous others. In addition, the Green Sea Turtle, a threatened species is known to be present in the segment.

The Diversion of 101,334 acre feet of water at a rate of 62,890 gallons per minute will expose the aforementioned aquatic life to impingement of marine organisms when trapped on the intake screen. Marine organisms are further exposed to entrainment when organisms small enough to pass through the intake screens, such as plankton, fish eggs, and larvae are killed during processing of the salt water. Entrainment organisms are killed by pressure and velocity changes caused by circulating pumps in the plant, chlorine and other chemicals used to prevent corrosion and fouling, and predation by filter feeders like mussels and barnacles that line intake pipes and themselves are considered a fouling nuisance.

The impacts of impingement and entrainment from desalination plants on the marine environment are not well understood. The TCEQ was directed to adopt Rules and Guidelines relating to the prevention of impingement and entrainment but have failed to do so. The lack of any Rules or Guidelines resulted in a Draft permit that only requires the applicant to adopt "reasonable measures" to prevent impingement and entrainment. The Draft Permit does not define what those reasonable measures are and therefore does not provide for any protection to aquatic life. More important, how would such a provision be enforced by the TCEQ since they do not define what the applicant must do to protect aquatic life? The Permit must include definitive measures to be taken on the prevention of impingement and entrainment.

Because the waters at the proposed intake structure are so shallow, the Applicant proposes to dredge a hole to accommodate an intake pipeline a mere 20 feet below the surface of the water. This is simply not deep enough to protect aquatic life and the dredging itself will cause disturbance in the habitat.

The TCEQ cannot ignore the cumulative impacts to aquatic life this diversion will have when combined with other uses of these waters in close proximity to the intake structure, including:

- the Diversions granted to Corpus Christi Liquefaction, authorized under WR Permit #13610;
- the Diversions granted to Cheniere Land Holdings, LLC, authorized in WR Permit #13605;
- the Diversions granted to Voestalpine Texas, LLC, authorized in WR Permit #13077;

- the Applicant's Application with the US Army Corp of Engineers to widen and deepen the La Quinta Channel in CESWF-PEC-CC;
- the Applicant's allowance of using its submerged lands off the shores of Portland near the intake structure to accommodate the dredging activity and relocation of seagrasses sought by MODA Midstream in its Application with The Army Corp of Engineers in SWG-1995-02221;
- the Wastewater Discharge Permit granted to Voestalpine Texas, LLC in Permit #WQ0005097000 just offshore of property owned by the Applicant and at a location only 5,000 feet from the proposed intake structure;
- and the Waste Water Discharge Permit granted to Gulf Coast Growth Ventures in TPDES Permit #WQ0005228000, which will discharge 9.3 million gallons of wastewater per day at temperatures of 110 degrees at Outfall 001, just offshore of property owned by the Applicant, and at a location that is only 2,800 feet from the proposed intake structure. The GCGV will begin discharges in the final quarter of 2021, long before any diversion granted to the Applicant.

Additionally, before granting the Permit, the TCEQ must review the application in accordance with applicable federal law, including

- **Endangered Species Act:** The ESA prohibits any actions that harm or kill threatened or endangered species
- **Marine Mammal Protection Act:** The MMPA generally prohibits harming or killing marine mammals – 16 U.S.C. § 1372
- **Rivers and Harbors Act and Clean Water Act § 404:** The project must comply with federal requirements for Army Corps approval of the construction of any structure in or over a navigable water, 33 U.S.C. § 403, or the addition of fill to any navigable water, 33 U.S.C. § 1344
- **National Environmental Policy Act, ESA, and Essential Fish Habitat:** Any federal involvement in the project, whether through financing, permitting, or otherwise, requires compliance with NEPA and the preparation of an Environmental Impact Statement. 42 U.S.C. § 4331 *et seq.* Similarly, federal involvement requires compliance with the ESA's consultation requirement. 16 U.S.C. § 1536. And federal involvement requires compliance with the Magnuson-Stevens Act's Essential Fish Habitat consultation requirement. 16 U.S.C. § 1855(b)

The Application and the Draft Permit clearly state that the Diversion is for industrial purposes. The Applicant has failed to provide and the Permit imposes no real measures for complying with a water conservation plan for industrial use. That plan must include:

(1) a description of the use of the water in the production process, including how the water is diverted and transported from the source(s) of supply, how the water is utilized in the production process, and the estimated quantity of water consumed in the production process and therefore unavailable for reuse, discharge, or other means of disposal;

(2) specific, quantified five-year and ten-year targets for water savings and the basis for the development of such goals;
(3) a description of the device(s) and/or method(s) within an accuracy of plus or minus 5.0% to be used in order to measure and account for the amount of water diverted from the source of supply;
(4) leak-detection, repair, and accounting for water loss in the water distribution system;
(5) application of state-of-the-art equipment and/or process modifications to improve water use efficiency; and
(6) any other water conservation practice, method, or technique which the user shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

Finally, the TCEQ is granting this Permit for Industrial uses. The TCEQ must assume the diverted waters will be used primarily for industrial cooling purposes. Accordingly, the Applicant's intake structure meets the definition of "cooling water intake structure" (CWIS). 40 CFR § 125.83 defines a CWIS as: "the total physical structure and any associated constructed waterways used to withdraw cooling water from waters of the U.S. The cooling water intake structure extends from the point at which water is withdrawn from the surface water source up to, and including, the intake pumps. As a CWIS, this Permit is subject to guidelines from Chapter 316 of the Clean Water Act. Yet, the TCEQ does not appear to be engaging in an analysis of whether the diverted waters will be used for cooling purposes or the applicability of Chapter 316. The TCEQ must conduct such an analysis and determine the applicability of these provisions.

For all of the aforementioned reasons, the Applicant's Permit should be denied.

Thank you.

Respectfully,

Errol A. Summerlin

Errol A. Summerlin

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 23, 2021 3:51 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: tuckerstxconnect@aol.com <tuckerstxconnect@aol.com>
Sent: Tuesday, March 23, 2021 3:48 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Jim Tucker

E-MAIL: tuckerstxconnect@aol.com

COMPANY:

ADDRESS: 109 BAYSHORE CIR
INGLESIDE TX 78362-4709

PHONE: 3617762486

FAX:

COMMENTS: Opposition and Request • I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel • I request that a public meeting be held for the community to express its concerns. • I request that a Contested Case Hearing be held Reasons: According to the permit, the Port of Corpus Christi

would be allowed to suck 62,890 gallons of water from La Quinta Channel every minute. Sucking in that amount of water that fast will require an enormous amount of suction power and I am concerned about aquatic life being trapped or killed in the process. This intake pipe is a death sentence! • I and my family members (spouse, children, grandchildren) love to fish/boat/swim/etc. along the Portland Shoreline where the intake pipe for the Port of Corpus Christi's desalination facility will be located or in Ingleside Cove where the discharge will flow to. I am concerned that given the number of small larvae which will be sucked up, turned to sludge, and deposited into landfills, fishing will be badly impaired in the region. • I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish - or for people! If the fish die, then the birds we love to watch will also die or leave the area. • I am concerned about possible health effects on me or my family from the chemicals used in the desalination process, including pre-treatment. • My neighbors fish for business and I am concerned about loss of income that will happen when aquatic life in La Quinta Channel and Corpus Christi Bay is harmed/destroyed by this desal plant. Which in turn will cause economic harm to our small community • Many of us suffered through the historic winter storm in February 2021 and were without power for several days in freezing temperatures due to the amount of demand placed on the electrical grid in Texas. The operating pumps required to suck 62,890 gallons of water per minute will take an enormous amount of power, placing even more strain on the grid. I am opposed to issuing a permit which would demand excessive amounts of energy to supply water only for industrial use. • Most of the desalinated water will be used by industry for cooling purposes. Aren't there federal regulations that apply to industrial cooling water intake structures? • Since Corpus Christi Bay connects to the Gulf of Mexico, doesn't diverting water from Corpus Christi Bay to support private industry without federal oversight amount to stealing from the Waters of the United States (WOTUS)? • Since Texas is already drought-prone and gets very hot, why is the Port of Corpus Christi enticing such thirsty high-energy-requiring industries to come here in the first place? Shouldn't they go where it's cooler and where there's more water? • Since this desal plant has been listed as a "recommended water strategy" on the Region N Water Plan for 2021, I expect that the Port of Corpus Christi will try to get a low-interest loan from the Texas Water Development Board (TWDB) to construct the plant. Isn't it a violation of Texas law to use public funds to support private industry? Who will have to pay back such a loan? • All of our area scientists, including from Texas Parks & Wildlife, the General Land Office, the UT Marine Science Institute, and the Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. There's even an expedited permitting process for this. Why is the Port of Corpus Christi, a public entity, insisting on putting intake and discharge inside Corpus Christi Bay in the first place. Aren't they listening? Why aren't they showing the way by pursuing the expedited permit process that will keep our Bay safer? • Why is the Port applying for this permit? Shouldn't it be the private industries that plan to use the desalinated water? • Why aren't industries paying to construct this plant? • Why aren't industries paying for pipelines to bring in water from offshore and pump the brine back offshore? After all, they pay for other pipelines that cross San Patricio County, tearing up communities and farm land.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 23, 2021 3:51 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: tuckerstxconnect@aol.com <tuckerstxconnect@aol.com>
Sent: Tuesday, March 23, 2021 3:50 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Judy Tucker

E-MAIL: tuckerstxconnect@aol.com

COMPANY:

ADDRESS: 109 BAYSHORE CIR
INGLESIDE TX 78362-4709

PHONE: 3617762486

FAX:

COMMENTS: Opposition and Request • I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel • I request that a public meeting be held for the community to express its concerns. • I request that a Contested Case Hearing be held Reasons: According to the permit, the Port of Corpus Christi

would be allowed to suck 62,890 gallons of water from La Quinta Channel every minute. Sucking in that amount of water that fast will require an enormous amount of suction power and I am concerned about aquatic life being trapped or killed in the process. This intake pipe is a death sentence! • I and my family members (spouse, children, grandchildren) love to fish/boat/swim/etc. along the Portland Shoreline where the intake pipe for the Port of Corpus Christi's desalination facility will be located or in Ingleside Cove where the discharge will flow to. I am concerned that given the number of small larvae which will be sucked up, turned to sludge, and deposited into landfills, fishing will be badly impaired in the region. • I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish - or for people! If the fish die, then the birds we love to watch will also die or leave the area. • I am concerned about possible health effects on me or my family from the chemicals used in the desalination process, including pre-treatment. • My neighbors fish for business and I am concerned about loss of income that will happen when aquatic life in La Quinta Channel and Corpus Christi Bay is harmed/destroyed by this desal plant. Which in turn will cause economic harm to our small community • Many of us suffered through the historic winter storm in February 2021 and were without power for several days in freezing temperatures due to the amount of demand placed on the electrical grid in Texas. The operating pumps required to suck 62,890 gallons of water per minute will take an enormous amount of power, placing even more strain on the grid. I am opposed to issuing a permit which would demand excessive amounts of energy to supply water only for industrial use. • Most of the desalinated water will be used by industry for cooling purposes. Aren't there federal regulations that apply to industrial cooling water intake structures? • Since Corpus Christi Bay connects to the Gulf of Mexico, doesn't diverting water from Corpus Christi Bay to support private industry without federal oversight amount to stealing from the Waters of the United States (WOTUS)? • Since Texas is already drought-prone and gets very hot, why is the Port of Corpus Christi enticing such thirsty high-energy-requiring industries to come here in the first place? Shouldn't they go where it's cooler and where there's more water? • Since this desal plant has been listed as a "recommended water strategy" on the Region N Water Plan for 2021, I expect that the Port of Corpus Christi will try to get a low-interest loan from the Texas Water Development Board (TWDB) to construct the plant. Isn't it a violation of Texas law to use public funds to support private industry? Who will have to pay back such a loan? • All of our area scientists, including from Texas Parks & Wildlife, the General Land Office, the UT Marine Science Institute, and the Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. There's even an expedited permitting process for this. Why is the Port of Corpus Christi, a public entity, insisting on putting intake and discharge inside Corpus Christi Bay in the first place. Aren't they listening? Why aren't they showing the way by pursuing the expedited permit process that will keep our Bay safer? • Why is the Port applying for this permit? Shouldn't it be the private industries that plan to use the desalinated water? • Why aren't industries paying to construct this plant? • Why aren't industries paying for pipelines to bring in water from offshore and pump the brine back offshore? After all, they pay for other pipelines that cross San Patricio County, tearing up communities and farm land.

Elisa Guerra

From:	PUBCOMMENT-OCC
Sent:	Monday, March 8, 2021 1:28 PM
To:	PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject:	FW: Public comment on Permit Number WRPERM 13630
Attachments:	La Quinta Desal Plant6.docx

eComment = PM, H
Attachment = PM, H

From: sheila_walton1@yahoo.com <sheila_walton1@yahoo.com>
Sent: Thursday, March 4, 2021 2:16 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Sheila Walton

E-MAIL: sheila_walton1@yahoo.com

COMPANY:

ADDRESS: 108 BAYSHORE DR
INGLESIDE TX 78362-4855

PHONE: 8176809485

FAX:

COMMENTS: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel I request that a public meeting be held for the community to express its concerns. I request that a Contested Case Hearing be held

Opposition and Request

- **I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel**
- **I request that a public meeting be held for the community to express its concerns.**
- **I request that a Contested Case Hearing be held**

Reasons:

According to the permit, the Port of Corpus Christi would be allowed to suck 62,890 gallons of water from La Quinta Channel every minute. Sucking in that amount of water that fast will require an enormous amount of suction power and I am concerned about aquatic life being trapped or killed in the process. This intake pipe is a death sentence!

- I and my family members (spouse, children, grandchildren) love to fish/boat/swim/etc. along the Portland Shoreline where the intake pipe for the Port of Corpus Christi's desalination facility will be located or in Ingleside Cove where the discharge will flow to. I am concerned that given the number of small larvae which will be sucked up, turned to sludge, and deposited into landfills, fishing will be badly impaired in the region.
- I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish - or for people! If the fish die, then the birds we love to watch will also die or leave the area.
- I am concerned about possible health effects on me or my family from the chemicals used in the desalination process, including pre-treatment.
- My neighbors fish for business and I am concerned about loss of income that will happen when aquatic life in La Quinta Channel and Corpus Christi Bay is harmed/destroyed by this desal plant. Which in turn will cause economic harm to our small community
- Many of us suffered through the historic winter storm in February 2021 and were without power for several days in freezing temperatures due to the amount of demand placed on the electrical grid in Texas. The operating pumps required to suck 62,890 gallons of water per minute will take an enormous amount of power, placing even more strain on the grid. I am opposed to issuing a permit which would demand excessive amounts of energy to supply water only for industrial use.
- Most of the desalinated water will be used by industry for cooling purposes. Aren't there federal regulations that apply to industrial cooling water intake structures?
- Since Corpus Christi Bay connects to the Gulf of Mexico, doesn't diverting water from Corpus Christi Bay to support private industry without federal oversight amount to stealing from the Waters of the United States (WOTUS)?
- Since Texas is already drought-prone and gets very hot, why is the Port of Corpus Christi enticing such thirsty high-energy-requiring industries to come here in the first place? Shouldn't they go where it's cooler and where there's more water?

- Since this desal plant has been listed as a "recommended water strategy" on the Region N Water Plan for 2021, I expect that the Port of Corpus Christi will try to get a low-interest loan from the Texas Water Development Board (TWDB) to construct the plant. Isn't it a violation of Texas law to use public funds to support private industry? Who will have to pay back such a loan?
- All of our area scientists, including from Texas Parks & Wildlife, the General Land Office, the UT Marine Science Institute, and the Harte Research Institute, have said, in published reports, that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. There's even an expedited permitting process for this. Why is the Port of Corpus Christi, a public entity, insisting on putting intake and discharge inside Corpus Christi Bay in the first place. Aren't they listening? Why aren't they showing the way by pursuing the expedited permit process that will keep our Bay safer?
- Why is the Port applying for this permit? Shouldn't it be the private industries that plan to use the desalinated water?
- Why aren't industries paying to construct this plant?
- Why aren't industries paying for pipelines to bring in water from offshore and pump the brine back offshore? After all, they pay for other pipelines that cross San Patricio County, tearing up communities and farm land.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Tuesday, March 23, 2021 3:44 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: harleygirlz@cableone.net <harleygirlz@cableone.net>
Sent: Tuesday, March 23, 2021 11:21 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Suzi Wilder

E-MAIL: harleygirlz@cableone.net

COMPANY:

ADDRESS: 1215 BAYSHORE DR
INGLESIDE TX 78362-4701

PHONE: 3615373418

FAX:

COMMENTS: My name is Suzie Wilder. I live at 1215 Bayshore Dr. in Ingleside on the Bay. I am a City Council Alderman and member of the Ingleside on the Bay Coastal Watch Association. I strongly oppose the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel. I request a two-week extension of the deadline for

comments on account of the recent freeze and loss of electricity in Texas. I also request a public meeting be held for the community to express its concerns and a contested case hearing. My husband and I own a pier in Corpus Christi Bay next to the La Quinta Channel. We enjoy fishing, boating, and swimming in the Bay with our children. We are very concerned about the impact this water rights permit will have on our water quality. With the Port of Corpus Christi seeking to suck in 62,890 gallons of water from La Quinta Channel every minute, aquatic life will get trapped in the intake pipe or killed in the process. In short, it is a death sentence! Killing fish larvae will adversely affect fishing in the area and directly impact my family's quality of life. Industry should not be allowed to use the waters of the United States to the detriment of the citizens of this region. Thank you.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Thursday, March 25, 2021 9:03 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

H

From: captaindpw@gmail.com <captaindpw@gmail.com>
Sent: Wednesday, March 24, 2021 3:46 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Daniel P Wilkerson

E-MAIL: captaindpw@gmail.com

COMPANY:

ADDRESS: 3196 REBECCA ST
INGLESIDE TX 78362-4649

PHONE: 3617658467

FAX:

COMMENTS: I Captain Daniel Wilkerson, owner and opperator of Family Fishing Charters in Ingleside Texas strongly oppose the intake permit for a desalination plant located on the La Quinta channel. The channel is home to many different species of creatures that can/will be negatively impacted by the the desalination process. Much of the area just across from the proposed location is a shallow estuary, and used as a nursery area for redfish, spotted sea trout, shrimp,

crabs and flounder. I have seen these fish in all stages of their life cycle from juveniles to fully grown adults. Many dolphins and turtles also call this area home. The La Quinta channel is a relatively closed area with only four small openings leading to Corpus Christi Bay. Locating a facility of this magnatude within this area is simply not good stewardship of the environment. The laquinta channel is also home of heavy industrial refineries, many being very old with an unknown amount of soil contamination that could potentially make it's way into our communities water system. There are safer areas to locate these facilities for both the environment and community as highlighted by the harte research institute. The impacts on my business could be overwhelming and the impacts on my community could be unrepairable. I ask that a contested case hearing take place reguarding this permit. Our tourism industry be not put in jeopardy over water to be used for industrial purposes. The plans need to be revised to locate the intake and discharges in the Gulf of Mexico where the health of our estuaries are not put at risk. A few extra feet of pipe is simply not worth the possibility of destroying an ecosystem. Sincerely, Capt. Dan Wilkerson Family Fishing Charters Ingleside Texas

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Friday, March 26, 2021 8:09 AM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: williamswes8@gmail.com <williamswes8@gmail.com>
Sent: Thursday, March 25, 2021 7:56 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Ira Williams

E-MAIL: williamswes8@gmail.com

COMPANY: Bahia Marina

ADDRESS: 84 BAYSHORE DR Bayshore Dr.
INGLESIDE TX 78362-4872

PHONE: 3617767295

FAX:

COMMENTS: Addendum to previous comments: I request a two-week extension of the deadline for comments due to the recent freeze and loss of electricity in Texas and the fact that this is much too important to rush through. I request

that a public meeting be held for the community to express its concerns. This is literally about the life or death of our community, and my business and livelihood. I also request that a Contested Case Hearing be held.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Thursday, March 25, 2021 5:31 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

From: williamswes8@gmail.com <williamswes8@gmail.com>
Sent: Thursday, March 25, 2021 3:47 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Ira W Williams

E-MAIL: williamswes8@gmail.com

COMPANY: Bahia Marina

ADDRESS: 84 BAYSHORE DR
INGLESIDE TX 78362-4872

PHONE: 3617767295

FAX:

COMMENTS: As a small, private marina operator in Ingleside on the Bay, Texas, located on Ingleside cover and only 4 miles from the planned Portland desal discharge area, I have serious and specific concerns about how a desal plant could harm and possibly devastate my marina business. We are a very small mom and pop operation that provides affordable slips to everyday boaters. We aren't a big yacht club, but a community marina. We also have a small, 5-unit apartment

building which provides affordable housing in a safe community, and we are host to Ingleside on the Bay's only restaurant. I can only imagine will happen if 90 million gallons of water gets sucked out of the Bay up by Portland, desalinated, and spit back out into La Quinta Channel as salty brine. It will kill all the fish in Ingleside Cove and eventually the whole Bay. People down here live and die for fishing, boating, swimming and other outdoor recreation. This marina is the primary livlihood for my wife and me, and we are scared that fish kills, polluted, hypersalinated water and the accompanying stench that will fill the air will destroy our business, and leave the property worthless, as no one will want to come to the area. All to support the growth and propagation of heavy industry. Already, in the seven years we've owned Bahia Marina, the landscape has completely changed because of heavy industry. We have giant flairs that blow pollution into the air all day and all night. We can no longer see many stretches of water because of giant containment berms which have been built to capture potential oil spills, and the noise, bangs, explosions, blasts, foul odors and heavy industrial traffic are truly making our business and community less and less desirable. Beside the death of the bay, the super saline slurry will dramatically increase rust, corrosion and infrastructure failure at the marina, costing more than we could ever afford to repair. Boat owners will not want to keep their vessels in that kind of water either. Imagine owning a boat but being afraid to put it in the water because of the potential detrimental impact of the water itself. Imagine not wanting to boat, live or play in a place that this will become, and owning a business in that place.

Elisa Guerra

From: PUBCOMMENT-OCC
Sent: Thursday, March 25, 2021 5:29 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WWW-WRAS
Subject: FW: Public comment on Permit Number WRPERM 13630

PM
H

From: theta002@yahoo.com <theta002@yahoo.com>
Sent: Thursday, March 25, 2021 3:34 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WRPERM 13630

REGULATED ENTY NAME WRPERM 13630

RN NUMBER: RN110844933

PERMIT NUMBER: WRPERM 13630

DOCKET NUMBER:

COUNTY: SAN PATRICIO

PRINCIPAL NAME: PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY

CN NUMBER: CN600885248

FROM

NAME: Brent Winborne

E-MAIL: theta002@yahoo.com

COMPANY:

ADDRESS: 326 SUNSET AVE
CORPUS CHRISTI TX 78404-2433

PHONE: 2108677706

FAX:

COMMENTS: I STRONGLY OPPOSE the Port of Corpus Christi's placing an intake pipe for a desalination plant in La Quinta Channel I request a two-week extension of the deadline for comments on account of the recent freeze and loss of electricity in Texas. I request that a public meeting be held for the community to express its concerns. I request that a

Contested Case Hearing be held I am concerned about the amount of salty brine that will be discharged from the desal plant, plus its mixing in with other waste water from the industries in La Quinta Channel. This can't be good for the fish - or for people! If the fish die, then the birds we love to watch will also die or leave the area.Most of the desalinated water will be used by industry for cooling purposes. Are not there federal regulations that apply to industrial cooling water intake structures? As a person that has great respect for Mother Nature; it is not logical for additional anthropogenic input of hyper-saline compounds into a brackish water biosphere. Since humans and most corporeal life is fallible it is reasonable to assume that not all variables have been thoroughly examined; therefore unforeseen consequences are probable to occur.