# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY INTEROFFICE MEMORANDUM

Date: October 3, 2022

To: Office of the Chief Clerk

Attn. Elisa Guerra and Mehgan Taack

From: Ruth Takeda

Staff Attorney, Environmental Law Division

Subject: Transmittal of documents to SOAH for Administrative Record

Applicant – Port of Corpus Christi Authority of Nueces County Permit application – 13630 Program area – Water Rights Permitting and Availability Section SOAH Docket No. 582-23-01502 TCEQ Docket No. 2021-0421-WR

In a permit hearing, the record in a contested case includes copies of the public notices relating to the permit application, as well as affidavits of public notices that are filed by the applicant directly with the TCEQ's Office of the Chief Clerk (OCC). In addition, the record includes the following documents that are provided to the OCC by the staff of the TCEQ Executive Director (ED), 30 Tex. Admin. Code § 80.118. Documents included with this transmittal are indicated below:

- $_{-}\sqrt{_{-}}$  The ED's final draft permit, which may include any special provisions or conditions.
- $_{--}\sqrt{_{-}}$  The ED's technical memorandum/ memoranda regarding the application. \_\_\_\_\_ The compliance history of the applicant.
- \_\_\_\_Copies of the public notices relating to the permit application, as well as affidavits regarding public notices.
- $_-\sqrt{}_-$ Any agency document determined by the ED to be necessary to reflect the administrative and technical review of the application. Specifically, the ED's memorandum declaring the application administratively complete.

The application is not included with this transmittal because it is the applicant's document and the applicant is the party who should offer it into evidence. **This is not a permit governed by HB 801 or SB 709.** 

This transmittal serves to also request that the OCC transmit the attached items, together with (a) the public notice documents (including the notice of hearing) and (b) where available for direct referrals only, the ED's Response to Comments to the State Office of Administrative Hearings.

## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



## WATER USE PERMIT

PERMIT NO. 13630 TYPE § 11.121

Permittee: Port of Corpus Christi Authority Address: P.O. Box 1541

of Nueces County Corpus Christi, Texas 78403

Filed: May 11, 2020 Granted:

Purpose: Industrial County: San Patricio

Watercourse: Corpus Christi Bay Watershed: San Antonio-Nueces Coastal

Basin

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

WHEREAS, the proposed diversion point is located at Latitude 27.873741° N, Longitude 97.294987° Win San Patricio County; and

WHEREAS, the Texas Commission on Environmental Quality finds that jurisdiction over the application is established; and

WHEREAS, this permit, if granted, is subject to requirements and orders of the South Texas Watermaster; and

WHEREAS, the Texas Commission on Environmental Quality finds that the issuance of the permit is consistent with the goals and policies of the Texas Coastal Management Program (CMP); and

WHEREAS, the Executive Director recommends that special conditions be included in the permit; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the Texas Commission on Environmental Quality in issuing this permit.

NOW, THEREFORE, this permit, designated Water Use Permit No. 13630, is issued to Port of Corpus Christi Authority of Nueces County subject to the following terms and conditions:

#### 1. USE

Permittee is authorized to divert and use not to exceed 101,334 acre-feet of water per year from Corpus Christi Bay, San Antonio-Nueces Coastal Basin, for industrial purposes in San Patricio County.

## 2. DIVERSION

Permittee is authorized to divert from a point on Corpus Christi Bay, located at Latitude 27.873741° N, Longitude 97.294987° W, at a maximum diversion rate of 140.12 cfs (62,890 gpm) in San Patricio County.

## 3. PRIORITY

The time priority of this right is May 11, 2020.

#### 4. CONSERVATION

Permittee shall implement water conservation plans that provide for the utilization of those practices, techniques, and technologies that reduce or maintain the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, and prevent the pollution of water, so that a water supply is made available for future or alternative uses. Such plans shall include a requirement that every water supply contract entered into on or after the effective date of this permit, including any contract extension or renewal, that each successive wholesale customer develop and implement conservation measures. If the customer intends to resell the water, then the contract for resale of the water shall have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures.

#### 5. SPECIAL CONDITIONS

- A. The special conditions in this permit are subject to adjustment by the commission if the commission determines, through an expedited public review process, that such adjustment is appropriate to achieve compliance with applicable environmental flow standards adopted pursuant to Texas Water Code § 11.1471. Any adjustments shall be made in accordance with the provisions of Texas Water Code § 11.147(e-1).
- B. Permittee shall implement reasonable measures in order to reduce impacts to aquatic resources due to entrainment or impingement. Such measures shall include, but shall not be limited to, the installation of screens at the diversion structure(s).
- C. Permittee shall install and maintain a measuring device, which accounts for, within 5% accuracy, the quantity of water diverted from the point authorized above in Paragraph 2. DIVERSION and maintain measurement records.
- D. Permittee shall allow representatives of the South Texas Watermaster reasonable access to the property to inspect the measuring device and records.

E. Permittee shall contact the South Texas Watermaster prior to diversion of water authorized by this permit.

This permit is issued subject to all superior and senior water rights in the San Antonio-Nueces Coastal Basin.

This permit is subject to the requirements and orders of the South Texas Watermaster.

Permittee agrees to be bound by the terms, conditions and provisions contained herein and such agreement is a condition precedent to the granting of this permit.

All other matters requested in the application which are not specifically granted by this permit are denied.

This permit is issued subject to the Rules of the Texas Commission on Environmental Quality and to the right of continuing supervision of state water resources exercised by the Commission.

	For the	Commission
Date Issued:		

## **Texas Commission on Environmental Quality**

INTEROFFICE MEMORANDUM

**To:** Hal Bailey, Project Manager **Date:** November 19, 2020

Water Rights Permitting Team

**Through:** Jason Godeaux, Team Leader

Resource Protection Team

Kristin Wang, Senior Water Conservation Specialist

Resource Protection Team

From: \_\_\_\_ Jennifer Allis, Senior Water Conservation Specialist

**Resource Protection Team** 

**Subject:** Port of Corpus Christi Authority of Nueces County

WRPERM 13630 CN600885248

Corpus Christi Bay, San Antonio-Nueces Coastal Basin

San Patricio County

## **APPLICATION SUMMARY**

Port of Corpus Christi Authority of Nueces County (Applicant) requests a water use permit to divert 101,334 acre-feet of water per year from a point on Corpus Christi Bay, San Antonio-Nueces Coastal Basin, at a maximum diversion rate of 140.12 cfs (62,890 gpm), for industrial purposes in San Patricio County.

## WATER CONSERVATION REVIEW

Pursuant to Title 30 Texas Administrative Code (TAC) §295.9(1), an application requesting a new appropriation of water requires the submittal of water conservation plans.

The Applicant submitted a water conservation plan for wholesale water providers. Additionally, the Applicant submitted an industrial water conservation plan.

Resource Protection staff reviewed the water conservation plans and found that the plans meet the requirements in 30 TAC Chapter 288.

Additionally, the Applicant is required to provide evidence that the amount of water appropriated will be beneficially used, i.e., effectively managed and not wasted pursuant to Texas Water Code (TWC),  $\S11.134(b)(3)(A)$ . Also, the Applicant must provide evidence that reasonable diligence will be used to avoid waste and achieve

water conservation pursuant to TWC §11.134(b)(4). To provide that evidence, the Applicant must submit a water conservation plan in accordance with 30 TAC Chapter 288. In applications where a new appropriation of water is requested, the review includes an analysis of whether the requested appropriation is reasonable and necessary for the proposed uses in accordance with TWC §11.134 and 30 TAC §297.50.

The purpose of this review is to:

- (1) determine whether reasonable water conservation goals have been set;
- (2) determine whether the proposed strategies can achieve the stated goals;
- (3) determine whether there is a substantiated need for the water and whether the amount to be appropriated is reasonable for the proposed use; and
- (4) determine whether the water conservation plan addresses a water supply need in a manner that is consistent with the state water plan and the relevant approved regional water plan.

If these criteria are met, then Resource Protection staff considers this sufficient evidence to conclude that the Applicant will avoid waste and achieve water conservation. This review forms a basis for permit conditions and limitations as provided by TWC §11.134.

## **Water Conservation Goals and Strategies**

As a wholesale water supplier for industrial customers, the Applicant submitted a water conservation plan.

The water conservation plan establishes goals for water savings:

- The 5-year goal is to increase water returned by 0.01 percent.
- The 10-year goal is an increase in water returned by 0.001 percent.

The water conservation plan discusses several programs that the Applicant will establish to help achieve the stated goals:

- Six months after startup and yearly thereafter, the data of water intake
  versus water returned will be reviewed and machinery, piping and processes
  will be monitored to determine if any leaks are found or increased efficiencies
  might be possible.
- Daily visual inspections will be performed and if any leaks are noted, a work order will be prepared for repair of the deficient item.
- A monitoring and record management program will be employed to track water deliveries, sales, and losses.
- Wastewater generated at the desalination plant will be treated and put back in the bay where originally diverted from.
- Successive customer conservation will be required in all water supply contracts.

Resource Protection staff determined that the overall water conservation strategies provided in the Port of Corpus Christi Authority's water conservation plan are reasonable and can help achieve and maintain the stated goals.

## Requirements for Water Right Application under 30 TAC §288.7

Under 30 TAC §288.7, a water conservation plan submitted with a water right application for a new or additional appropriation of water must include data and information which:

- (1) supports the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan;
- (2) evaluates conservation as an alternative to the proposed appropriation; and
- (3) evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

As part of their application, the Applicant submitted information to address these requirements.

## Consideration of Water Conservation Goals

The practice of utilizing desalination technology to establish an alternate water supply source is supported under 30 TAC Chapter 288. The definition for Conservation is, "Those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water, or increase the recycling and reuse of water so that a water supply is made available for future or alternative uses."

## Conservation as an Alternative to the Proposed Appropriation

Regional water planning guidelines require each region to consider water conservation to meet projected shortages, although funding to implement such water conservation programs is limited. For the draft 2021 Region N Water Plan, Conservation is shown as a recommended strategy for all water user groups with needs identified for the planning period.

The regional water planning group adopted the following conservation recommendations for the 2021 Plan:

- Irrigation, manufacturing, and mining water user groups with identified needs were recommended to reduce water use by 15 percent by 2070.
- Manufacturing water user groups report the largest identified needs in the region by category. Manufacturers were recommended to continue to pursue best management practices to reduce water consumption.

#### Feasible Alternatives to New Water Development

The draft 2021 Region N Water Plan include recommendations for five seawater desalination plants to increase water supplies for Nueces and San Patricio County manufacturing users. The cumulative water supplies from recommended water

Port of Corpus Christi Authority of Nueces County, 13630 Corpus Christi Bay, San Antonio-Nueces Coastal Basin Page 4 of 5

management strategies exceeds identified shortages. However, no alternative water management strategies are recommended as part of the planning process.

Desalination is the only recommended strategy that has sufficient quantity to meet the projected water needs in these counties.

The proposed La Quinta desalination plant will be designed to be scalable so that it can be built and can expand to accommodate additional water needs as they come on-line. The Port of Corpus Christi foresees these near-term demands to be consistent with an additional, large-scale project coming on-line during the 2020 planning decade in the Corpus Christi area/San Patricio County. Desalination can provide a 100 percent unlimited reliability of source water; therefore, making it the best alternative for new water development when comparing to the other alternatives which rely on surface water sources.

#### **Water Need**

The total population of the Coastal Bend Region is projected to increase from 614,790 in 2020 to 744,544 by 2070. Similarly, the total water demand is projected to increase from 261,970 acre-feet in 2020 to 343,244 acre-feet by 2070.

The Coastal Bend Region shows water supply shortages throughout the 50-year planning cycle. According to the draft 2021 Region N Water Plan, the Region will have water supply shortages from 2020 through 2070, indicating a need for increased source water supplies. These shortages are due to large manufacturing demands in Nueces and San Patricio counties. Beginning in 2020 a shortage of 13,530 acre-feet exists within the Region and increases to a shortage of 49,363 acre-feet by 2070.

The Coastal Bend Region has four current regional wholesale water providers: the City of Corpus Christi; San Patricio Municipal Water District (SPMWD); South Texas Water Authority (STWA); and Nueces County Water Control and Improvement District No.3 (Nueces County WCID 3). According to the draft 2021 Region N Water Plan, the Port of Corpus Christi was identified as a potential future wholesale water provider, associated with the recommended seawater desalination strategy to primarily serve future San Patricio County and Nueces County manufacturing users.

## **Consistency with State and Regional Water Plans**

Seawater desalination is included as a water management strategy in the 2016 Region N Water Plan and in the draft 2021 Region N Water Plan. This strategy will increase water supplies available for both the Region's municipal retail and wholesale customers, as well as steam-electric, and manufacturing in Region N if approved. The proposed project also promotes regionalization and serves as an alternative to existing fresh water supplies that further promotes conservation of that water supplies.

Port of Corpus Christi Authority of Nueces County, 13630 Corpus Christi Bay, San Antonio-Nueces Coastal Basin Page 5 of 5

The Port of Corpus Christ has proposed two desalination strategies in Nueces and/or San Patricio counties to meet manufacturing water demands beginning in the 2020 planning decade. They intend to compliment the City of Corpus Christi's efforts to implement desalination in the Region. This project would be in addition to the other desalination projects to secure a drought-proof source of water.

As such, the application is consistent with the 2016 Region N Water Plan, the 2017 State Water Plan, and the draft 2021 Region N Water Plan.

#### RECOMMENDATIONS

Based on the analysis, Resource Protection staff has evaluated the application and determined that it meets the review requirements.

The following water conservation language should be included in the permit, if granted:

Permittee shall implement water conservation plans that provide for the utilization of those practices, techniques, and technologies that reduce or maintain the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, and prevent the pollution of water, so that a water supply is made available for future or alternative uses. Such plans shall include a requirement that in every water supply contract entered into on or after the effective date of this permit, including any contract extension or renewal, that each successive wholesale customer develop and implement conservation measures. If the customer intends to resell the water, then the contract for resale of the water shall have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures.

## **Texas Commission on Environmental Quality**

INTEROFFICE MEMORANDUM

To: Hal Bailey, Project Manager Date: November 23, 2020

Water Rights Permitting Team

Through: Jason Godeaux, Team Leader

Resource Protection Team

From: George Gable, Aquatic Scientist

GMG // Resource Protection Team

Subject: Port of Corpus Christi Authority of Nueces County

WRPERM 13630 CN600885248

Corpus Christi Bay, San Antonio-Nueces Coastal Basin

San Patricio County

Environmental reviews of water right applications are conducted in accordance with applicable provisions of the Texas Water Code (TWC) and the administrative rules of the Texas Commission on Environmental Quality (TCEQ). The provisions applicable to environmental reviews can vary according to the type and the location of the authorization requested.

## **APPLICATION SUMMARY**

Port of Corpus Christi Authority of Nueces County (Applicant) requests a water use permit to divert a maximum of 101,334 acre-feet of water per year from a point on Corpus Christi Bay, San Antonio–Nueces Coastal Basin, at a maximum diversion rate of 140.12 cfs (62,890 gpm), for industrial purposes in San Patricio County.

#### **ENVIRONMENTAL ANALYSIS**

On February 12, 2014, the TCEQ adopted environmental flow standards for the Nueces River and its associated tributaries, tributaries in the Nueces-Rio Grande Coastal Basin, and Corpus Christi and Baffin Bays (Title 30 Texas Administrative Code (TAC) Chapter 298 Subchapter F). These environmental flow standards are considered adequate to support a sound ecological environment (Title 30 TAC §298.410). This review is conducted in accordance with §11.147(e-3) of the TWC and Title 30 TAC Chapter 298 Subchapter F (Nueces River and Corpus Christi and Baffin Bays). The Applicant's proposed diversion point is located on Corpus Christi Bay.

Port of Corpus Christi Authority of Nueces County, 13630 Corpus Christi Bay, San Antonio-Nueces Coastal Basin Page 2 of 2

## **RECOMMENDATIONS**

Resource Protection staff have no recommendations regarding this proposed permit, if granted.

## **Texas Commission on Environmental Quality**

#### INTEROFFICE MEMORANDUM

To: Hal E. Bailey, Jr., Project Manager Date: December 4, 2020

Water Rights Permitting Team

Through: Kathy Alexander, Ph.D., Technical Specialist

Water Availability Division

From: Siavash Bassam, Hydrologist

Surface Water Availability Team

Subject: Port of Corpus Christi Authority of Nueces County

WRPERM 13630 CN600885248

Corpus Christi Bay, San Antonio-Nueces Coastal Basin

San Patricio County

### **HYDROLOGY REVIEW**

## **Application Summary**

Port of Corpus Christi Authority of Nueces County (Applicant) requests a water use permit to divert 101,334 acre-feet of water per year from a point on Corpus Christi Bay, San Antonio–Nueces Coastal Basin, at a maximum diversion rate of 140.12 cfs (62,890 gpm), for industrial purposes in San Patricio County.

The application was declared administratively complete on May 11, 2020.

## **Hydrology Review**

Resource Protection staff did not recommend instream flow requirements for this application. See the Resource Protection Memo dated November 23, 2020.

On February 12, 2014, the TCEQ adopted environmental flow standards for the Nueces River, and Corpus Christi and Baffin Bays (Chapter 298-Environmetal Flow Standards for Surface Water, Subchapter F). The adopted rules include freshwater inflow standards for the Nueces Bay and Delta. This application is located in Corpus Christi Bay which is downstream of the location where the freshwater inflow standards apply. Therefore, this application does not impair freshwater inflows to Nueces Bay and Delta. Because staff found that the application did not impair the freshwater inflow regime, which by rule is adequate to support a sound ecological environment, and because one of the purposes of the adopted rules is to protect coastal natural resources the application is consistent with any applicable Coastal Management Program (CMP) goals and policies.

Port of Corpus Christi Authority of Nueces County, 13630 Corpus Christi Bay, San Antonio - Nueces Coastal Basin Page 2 of 2

Regarding water availability, no analysis is needed because the application is located in Corpus Christi Bay where the water is saline

In addition, the application is subject to the requirements and orders of the South Texas Watermaster. The Watermaster actively manages water rights on a daily basis and protects senior water rights in times of shortage.

## Conclusion

Staff can support granting the application.

Note that the application is subject to the requirements and orders of the South Texas Watermaster.

Siavash Bassam

Siavash Bassam, Hydrologist

## **TCEQ Interoffice Memorandum**

TO:

Office of the Chief Clerk

Texas Commission on Environmental Quality

THRU:

Chris Kozlowski, Team Leader Water Rights Permitting Team

FROM:

Sarah Henderson, Project Manager

Water Rights Permitting Team

DATE:

May 11, 2020

SUBJECT:

Port of Corpus Christi Authority of Nueces County

WRPERM 13630

CN600885248, RN110844933

Application No. 13630 for a Water Use Permit

Texas Water Code § 11.121, Requiring Published and Mailed Notice

Corpus Christi Bay, San Antonio - Nueces Coastal Basin

San Patricio County

The application was received on September 3, 2019. Additional information and fees were received on December 3, 2019, January 28, February 4, and March 18, 2020. The application was declared administratively complete and accepted for filing with the Office of the Chief Clerk on May 11, 2020. Published and mailed notice to the water right holders of record within the San Antonio - Nueces Coastal Basin is required pursuant to Title 30 Texas Administrative Code § 295.151.

All fees have been paid and the application is sufficient for filing.

Sarah E Henderson

Sarah Henderson, Project Manager Water Rights Permitting Team

Water Rights Permitting and Availability Section

OCC Mailed Notice Required

**⊠**YES

 $\square$ NO