

Appendix P

Coastal Zone Management Consistency Determination

Job No. PCA20166

APPENDIX P

FINAL
TEXAS COASTAL ZONE MANAGEMENT PROGRAM
CONSISTENCY DETERMINATION
FOR THE
PROPOSED CORPUS CHRISTI SHIP
CHANNEL DEEPENING PROJECT

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March 2024

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Acronyms and Abbreviations

BMP	best management practice
BU	beneficial use
CCSC	Corpus Christi Ship Channel
CDP	channel deepening project
CNRA	Coastal Natural Resource Area
DA	Department of Army
EIS	Environmental Impact Statement
GLO	Texas General Land Office
Gulf	Gulf of Mexico
LEDPA	least environmentally damaging practicable alternative
mcy	million cubic yards
MLLW	mean lower low water
NEPA	National Environmental Policy Act
PA	placement area
PCCA or Applicant	Port of Corpus Christi Authority
SAV	submerged aquatic vegetation
SWC	USACE, Galveston District
TCEQ	Texas Commission on Environmental Quality
TxDOT	Texas Department of Transportation
USACE	U.S. Army Corps of Engineers
USC	United States Code
VLCC	very large crude carrier

1.0 INTRODUCTION

The Port of Corpus Christi Authority (PCCA or Applicant) applied to the U.S. Army Corps of Engineers (USACE), Galveston District, for a Department of Army (DA) permit. The DA permit application is for deepening of the Corpus Christi Ship Channel (CCSC). The application was originally submitted on January 3, 2019. Based on comments provided by the USACE on May 23, 2019, the application was revised June 4, 2019. The DA permit action is governed under the following statutes:

- **Section 10 of the Rivers and Harbors Act of 1899:** Section 10 of the Rivers and Harbors Act prohibits the construction of structures or obstructions in navigable waters without consent of Congress (33 United States Code [USC] 403). Structures include wharves, piers, jetties, breakwaters, bulkheads, etc. The Rivers and Harbors Act also considers any changes to the course, location, condition, or capacity of navigable waters and includes dredge and fill projects in those waters. The USACE oversees implementation of this law. The preferred action would include construction of structures and/or work that may affect navigable waters.
- **Section 14 of the Rivers and Harbors Act of 1899:** Section 14 of the Rivers and Harbors Act authorizes the USACE to approve alterations to public works projects operated and maintained by non-Federal sponsors known as Section 408 (33 USC 408). Any modification to a Federally maintained USACE project requires 408 approval from the USACE Chief of Engineers. The preferred action would constitute a major modification to a Federal navigation channel which will require a more comprehensive review and evaluation.
- **Section 404 of the Clean Water Act:** Section 404 of the Clean Water Act (33 USC 1344) normally requires a USACE permit for the discharge or deposition of dredged or fill material and for the building of structures in all waters of the United States. The preferred action would include the discharge of dredged or fill material into waters of the United States. This is responsible for ensuring “no net loss” of wetlands by requiring permit applicants to make every effort to avoid and minimize aquatic resource impacts and provide compensatory mitigation to offset any permitted impacts. The USACE can only permit the least environmentally damaging practicable alternative (LEDPA) as it pertains to regulated fill discharges. For this preferred project the LEDPA only applies to the Dredged Material Management Plan.
- **Section 103 of the Marine Protection, Research, and Sanctuaries Act:** Section 103 of the Marine Protection, Research, and Sanctuaries Act prescribes regulations, procedures, and evaluations applicable to Federal projects for the placement of dredged material in offshore waters. The preferred action would include construction of structures and/or work that may affect ocean disposal of dredged material.

Based on the DA permit application submitted by PCCA, the USACE determined that the permitting action for the preferred project constitutes a major Federal action. The USACE published a Notice of Intent to prepare a Draft Environmental Impact Statement (EIS), which was published in the *Federal Register* on April 7, 2020.

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4323 et seq.), the USACE serves as the Lead Agency for the preparation of the EIS. A Final EIS has been prepared to

analyze and disclose the potential impacts of the PCCA Channel Deepening Project (CDP) and reasonable alternatives on the natural and human environment. It is intended to be sufficient in scope to address Federal, State, and local requirements with respect to the preferred activities and permit approvals. As part of the NEPA process, the U.S. Environmental Protection Agency, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, the U.S. Fish and Wildlife Service, and the U.S. Coast Guard are Cooperating Agencies. The Texas Commission on Environmental Quality (TCEQ) and the Texas Parks and Wildlife Department are commenting agencies.

1.1 PROJECT LOCATION

The Applicant's Preferred Alternative is located within the existing channel bottom of the CCSC starting at Station 110+00 near the southeast side of Harbor Island, traversing easterly through the Aransas Pass, and extending beyond the currently authorized terminus Station -330+00 an additional 29,000 feet terminating out into the Gulf of Mexico (Gulf) at the proposed new Terminus Station -620+00, an approximate distance of 13.8 miles, in Port Aransas, Nueces County, Texas. This segment is currently maintained to the Federally authorized depth of -54.0 feet mean lower low water (MLLW) along the Entrance Channel and to -46.4 feet MLLW between the Entrance Channel to 0.5 mile east of Harbor Bridge. The Federally authorized Corpus Christi Ship Channel Improvement Project has deepened the offshore section outside the jetties from -49 feet MLLW to -56 feet MLLW and will widen the CCSC from 500 to 530 feet in the reach from Port Aransas to Ingleside and from 400 to 530 feet in Corpus Christi Bay with the addition of barge lanes.

1.2 APPLICANT'S PREFERRED ALTERNATIVE

The CCSC is currently authorized by the USACE to project depths of -54 feet and -56 feet MLLW from Station 110+00 to Station -330+00 as part of the CCSC Improvement Project. The current authorized width of the CCSC is 600 feet inside the jetties and 700 feet in the entrance channel.

The Applicant's Preferred Alternative would deepen the channel from Station 110+00 to Station -72+50 to a maximum depth of -75 feet MLLW (with 2 feet of advanced maintenance and 2 feet of allowable overdredge), and from Station -72+50 to Station -330+00, the channel would be deepened to a maximum depth of -77 feet MLLW (with 2 feet of advanced maintenance and 2 feet of allowable overdredge). The preferred project includes a 29,000-foot extension of the CCSC from Station -330+00 to Station -620+00 to a maximum depth of -77-foot MLLW (with 2 feet of advanced maintenance and 2 feet of allowable overdredge) to reach the -80-foot MLLW bathymetric contour in the Gulf. The preferred project would span approximately 13.8 miles from a location near the southeast side of Harbor Island to the -80-foot MLLW bathymetric contour in the Gulf. The preferred project would cover approximately 1,778 acres, creating approximately 46 million cubic yards (mcy) of new work dredged material (17.1 mcy of clay and 29.2 mcy of sand).

The preferred project consists of the following:

- Deepening a portion of the CCSC from the current authorization of –54 and –56 feet MLLW to final constructed deepened channel ranging from –75 to –77 feet MLLW to accommodate fully laden very large crude carriers (VLCC) transiting from Harbor Island to the Gulf from Stations 110+00 to –620+00;
- Extending the existing terminus of the authorized channel an additional 29,000 feet into the Gulf to reach the –80-foot MLLW bathymetric contour to accommodate fully-laden VLCCs transiting from Harbor Island to the Gulf;
- Expanding the existing Inner Basin at Harbor Island as necessary to accommodate VLCCs turning;
- Placement of new work dredged material into waters of the United States for beneficial use (BU) sites located in and around Corpus Christi and Redfish bays;
- Placement of dredged material nearshore berms for beach restoration along San José and Mustang islands; and
- Transport of new work dredged material to the Corpus Christi New Work Ocean Dredged Material Disposal Site.

1.3 PROJECT PURPOSE

The overall project purpose, as determined by the USACE after concurrence with the Cooperating Agencies is: To safely, efficiently, and economically export current and forecasted crude oil inventories via VLCC, a common vessel in the world fleet. Crude oil is delivered via pipeline from the Eagle Ford and Permian Basins to multiple locations at the Port. Crude oil inventories exported at the Port have increased from 280,000 barrels per day in 2017 to 1,650,000 barrels in January 2020 with forecasts increasing to 4,500,000 barrels per day by 2030. Current facilities require vessel lightering to fully load a VLCC which increases cost and effects safety.

The purpose of the preferred project, as provided by the Applicant, is to construct a channel with the capability to accommodate transit of fully laden VLCCs from multiple locations on Harbor Island into the Gulf. Factors influencing the Applicant’s need for the project include:

- The ability for more efficient movement of U.S. produced crude oil to meet current and forecasted demand in support of national energy security and national trade objectives,
- Enhancement of the PCCA’s ability to accommodate future growth in energy production, and
- Construction of a channel project that the PCCA can readily implement to accommodate industry needs.

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2.0 IMPACTS ON COASTAL NATURAL RESOURCE AREAS

The following Coastal Natural Resource Areas (CNRA), as listed in Texas Natural Resources Code, §33.203(1), are included for their relevance to the PCCA CDP:

- Waters of the open Gulf
- Waters under tidal influence
- Submerged lands
- Coastal wetlands
- Submerged aquatic vegetation (SAV)
- Tidal sand and mud flats
- Oyster reefs
- Coastal barriers
- Coastal shore areas
- Gulf Beaches
- Special Hazard Areas
- Critical Erosion Areas
- Coastal Preserves

2.1 WATERS OF THE OPEN GULF OF MEXICO

A portion of the Applicant's Preferred Alternative would be constructed within water of the open Gulf and would alter bathymetry to accommodate the deeper channel. Additionally, some dredged materials would be discharged in an Ocean Dredged Material Disposal Site. The release of sediment during dredging increases turbidity in the water column, which creates a sediment plume, the extent of which is determined by the direction and strength of the currents and particle size. Due to the capacity and natural variation in phytoplankton and algal populations, the impacts to phytoplankton and algae from project construction, dredging within the project area, dredged material placement of new work and maintenance material, and placement of material for BU project features would be temporary. Impacts to zooplankton from project construction and dredging within the project area, dredged material placement of new work and maintenance material, and placement of material for BU project features would be temporary.

2.2 WATERS UNDER TIDAL INFLUENCE

The majority of the Applicant's Preferred Alternative would be constructed within waters under tidal influence. Although there would be direct impacts from dredging and placement activities, placement areas (PAs) include BU to improve eroded or damaged shorelines.

The Applicant's Preferred Alternative may have the following impacts to waters under tidal influence in Corpus Christi Bay based on modeling (W.F. Baird and Associates, 2022):

- Salinity modeling predicts that channel deepening would increase salinity in the project area by less than 1 parts per thousand (W.F. Baird and Associates, 2022). At less than 1 parts per thousand, the magnitude of change is negligible and would be less than significant given the wide salinity tolerances of estuarine species.

- The velocity magnitudes in the CCSC entrance channel are expected to be lower with the deeper channel compared to current conditions (W.F. Baird and Associates, 2022). This slight decrease in velocity at the entrance channel is not anticipated to impact fauna.
- The tidal range/amplitude is expected to increase with channel deepening (W.F. Baird and Associates, 2022). The model predicted that the tidal amplitude at the Inner Channel near Port Aransas had the largest increase of about 15 percent. The increase in tidal amplitudes were found to be approximately 11 percent in Redfish Bay, 8 percent in Corpus Christi Bay, 7 percent in Nueces Bay, and 3 percent in Rockport.

2.3 SUBMERGED LANDS

The Applicant's Preferred Alternative would result in permanent loss of open-bay bottom and tidal habitat through some of the inshore placement actions. Bathymetry changes would also occur through channel deepening. Bathymetric changes would also occur from beach nourishment placement actions (direct placement and nearshore berms).

2.4 COASTAL WETLANDS

Channel deepening would not impact coastal wetlands, but inshore PAs would impact 16.61 acres of tidal wetlands and 122.46 acres of freshwater wetlands. Some placement actions are intended to create coastal prairie or marsh habitat and would protect adjacent seagrass and wetlands. Short-term localized impacts are expected during restoration activities because of increased turbidity, or thin-layer placement, for example. Although channel modifications can alter erosion and salinity (which could in turn affect wetlands or SAV) no significant change in water exchange, salinity, and inflow patterns would occur with the Applicant's Preferred Alternative.

2.5 SUBMERGED AQUATIC VEGETATION

The proposed channel dredging for the Applicant's Preferred Alternative would have no direct impacts to SAV as they are not present within the project footprint for proposed channel deepening. Indirect impacts from turbidity would be limited to the area around the dredging, and no significant impacts would be expected to seagrass from temporary turbidity. Although channel modifications can alter erosion and salinity (which could in turn affect wetlands or SAV), no significant change in water exchange, salinity, and inflow patterns would occur with the Applicant's Preferred Alternative.

The project footprint associated with proposed BU sites include areas where SAV has been mapped and includes 6.88 acres of impact. SAV would not be affected by dredged material placement unless specifically targeted for restoration or enhancement from BU actions. Although SAV impacts may occur with dredged material placement actions, it should be noted that dredged material would be used at all BU sites to either convert deep open water areas to protect adjacent shallow bathymetry areas that support tidal wetlands or SAV, or restore eroding shorelines that may protect areas of SAV.

2.6 TIDAL SAND AND MUD FLATS

The Applicant's Preferred Alternative includes PAs and actions that would impact tidal sand and mud flats; however, those placement actions are intended as BU to either convert deep open water areas to protect adjacent shallow bathymetry areas that support tidal wetlands or SAV, or restore eroding shorelines that may protect areas of SAV. Placement areas would impact 84.85 acres of flats (Mott MacDonald, 2021, 2022).

2.7 OYSTER REEFS

A total of 0.10 acres of live oyster reef habitat occurs in the footprint of placement site HI-E and would be directly impacted by the CDP. The Texas General Land Office (GLO, 2021) indicates 32 acres of mapped oyster reef habitat occur in the remainder of the project area and 3.17 acres of oysters were mapped within a 500-foot construction buffer of the inshore PAs (Triton Environmental Solutions, 2021, 2022). These oyster areas could be indirectly impacted by increased turbidity during construction of placement site HI-E. Turbidity increases from construction of the Applicant's Preferred Alternative would be temporary and local. The slight increase in salinity that is expected resulting from the Applicant's Preferred Alternative is not anticipated to cause any long-term impacts to oyster reefs in the project area. Increased nutrients from dredging activities could cause algal blooms that could impact oysters. Water column turbidity would increase during project construction that could affect survival or growth of oysters nearby.

2.8 COASTAL BARRIERS

The Applicant's Preferred Alternative includes some placement actions consisting of beach nourishment and nearshore berms that would have positive impacts in terms of maintaining coastal barriers. Dredged material from channel deepening would be used beneficially for nearshore berms for beach nourishment along San José and Mustang islands. Beach nourishment placement at MI would result in 362.2 acres of beach impacts. Beach nourishment at and SJI would result in 441.2 acres of beach habitat impacts.

2.9 COASTAL SHORE AREAS

Some portions of the Applicant's Preferred Alternative would be constructed within 100 feet landward of the high tide line, which is within coastal shore areas. The Applicant's Preferred Alternative includes placement actions that include beach nourishment that would have positive impacts in terms of maintaining coastal barriers. Dredged material from channel deepening would be used beneficially for nearshore berms for potential beach nourishment along San José and Mustang islands.

2.10 GULF BEACHES

The Applicant's Preferred Alternative includes placement activities consisting of beach nourishment that would have positive impacts in terms of maintaining coastal barriers and protecting these coastal shore areas during storm surges. Dredged material from channel deepening would be used beneficially for

nearshore berms for potential beach nourishment along San José and Mustang islands. Actions include direct placement on beaches and nearshore berms. Beach nourishment placement at MI would result in 362.2 acres of beach impacts. Beach nourishment at SJI would result in 441.2 acres of beach habitat impacts.

2.11 SPECIAL HAZARD AREAS

The entirety of the Applicant's Preferred Alternative would be constructed within the 100-year floodplain. Dredged material from channel deepening would be used for PA levee improvements and fill, shoreline restoration, and beach nourishment, which should improve the natural storm-buffer functions. Dredged material from channel deepening would be used for nearshore berms for potential beach nourishment along San José and Mustang islands. Dredged material from channel deepening would be used beneficially to convert deep open water areas to shallow bathymetry to support the establishment of tidal wetlands or PAs.

2.12 CRITICAL EROSION AREAS

Some of the placement actions for the Applicant's Preferred Alternative are intended to repair eroded shorelines near Port Aransas. Dredged material from channel deepening would be used beneficially for nearshore berms for potential beach nourishment along San José and Mustang islands.

2.13 COASTAL PRESERVES

No impact to coastal preserves would result from the Applicant's Preferred Alternative. Dredged material from channel deepening would be used beneficially around Redfish Bay, which contains the Redfish Bay State Scientific Area, containing approximately 14,000 acres of seagrasses. "Voluntary No-prop Zones" were established by the Texas Parks and Wildlife Department in this area to protect the five unique species of seagrasses from damage by outboard motor propellers. Some placement actions may function as a buffer to seagrass found in Redfish Bay State Scientific Area and would involve: 1) convert deep open water areas to shallow bathymetry to support either establishment of tidal wetlands or SAV, or 2) restore eroding shorelines that would protect large areas of SAV.

3.0 COMPLIANCE WITH GOALS AND POLICIES

The following rules, as outlined under the Texas Administrative Code (Title 31, Part 16), governing the Texas Coastal Management Program were reviewed for compliance:

- §501.15 – Policy for Major Actions
- §501.25 – Policy for Dredging and Dredged Materials and Placement
- §501.26 – Policies for Construction in the Beach/Dune System
- §501.27 – Policies for Development in Coastal Hazard Areas
- §501.28 – Policies for Development Within Coastal Barrier Resource System Units and Otherwise Protected Areas on Coastal Barriers
- §501.31 – Policies for Transportation Projects
- §501.32 – Policies for Emission of Air Pollutants

3.1 SECTION 501.15 – POLICY FOR MAJOR ACTIONS

- (a) *For purposes of this section, "major action" means an individual agency or subdivision action listed in §505.11 of this title (relating to Actions and Rules Subject to the Coastal Management Program), §506.12 of this title (relating to Federal Actions Subject to the Coastal Management Program), or §505.60 of this title (relating to Local Government Actions Subject to the Coastal Management Program), relating to an activity for which a Federal environmental impact statement under the National Environmental Policy Act, 42 United States Code Annotated, §4321, et seq. is required.*
- (b) *Prior to taking a major action, the agencies and subdivisions having jurisdiction over the activity shall meet and coordinate their major actions relating to the activity. The agencies and subdivisions shall, to the greatest extent practicable, consider the cumulative and secondary adverse effects, as described in the Federal environmental impact assessment process, of each major action relating to the activity.*
- (c) *No agency or subdivision shall take a major action that is inconsistent with the goals and policies of this chapter. In addition, an agency or subdivision shall avoid and otherwise minimize the cumulative adverse effects to coastal natural resource areas of each of its major actions relating to the activity.*

Compliance: The Applicant’s Preferred Alternative is being evaluated by State and Federal agencies, and the public, through the NEPA compliance processes associated with an EIS. Potential cumulative effects with past, present, and reasonably foreseeable actions on CNRAs may be beneficial in nature as the PAs for the Applicant’s Preferred Alternative include placement activities that target

restoration of eroded and storm damaged CNRAs. Compliance with State and Federal regulations and use of best management practices (BMPs) would avoid and minimize impacts.

3.2 SECTION 501.23 – POLICIES FOR DEVELOPMENT IN CRITICAL AREAS

- (a) *Dredging and construction of structures in, or the discharge of dredged or fill material into, critical areas shall comply with the policies in this section. In implementing this section, cumulative and secondary adverse effects of these activities will be considered.*
- (1) *The policies in this section shall be applied in a manner consistent with the goal of achieving no net loss of critical area functions and values.*
- (2) *Persons proposing development in critical areas shall demonstrate that no practicable alternative with fewer adverse effects is available.*
- (3) *In evaluating practicable alternatives, the following sequence shall be applied:*
- (A) *Adverse effects on critical areas shall be avoided to the greatest extent practicable.*
- (B) *Unavoidable adverse effects shall be minimized to the greatest extent practicable by limiting the degree or magnitude of the activity and its implementation.*
- (C) *Appropriate and practicable compensatory mitigation shall be required to the greatest extent practicable for all adverse effects that cannot be avoided or minimized.*

Compliance: Discharges within CNRAs are intended to restore eroded and storm-damaged areas. Placement actions include restoration of eroded shorelines, PA levee improvement and fill, repair of storm-damaged shorelines, and potential beach nourishment through direct placement and nearshore berms. These actions target beneficial use and were preferred over offshore disposal or other alternatives with less contribution to CNRA function and value. In the area with the greatest increase in tidal range/amplitude, there is an abundance of developed and industrial shorelines. Existing CNRAs in this area have experienced severe erosion from storms and ship wakes and BU actions are intended to improve these areas. Dredging within the footprint of the existing channel also minimizes new dredge work impacts.

- (7) *Development in critical areas shall not be authorized if significant degradation of critical areas will occur. Significant degradation occurs if:*
- (A) *the activity will jeopardize the continued existence of species listed as endangered or threatened, or will result in likelihood of the destruction or adverse modification*

of a habitat determined to be a critical habitat under the Endangered Species Act, 16 United States Code Annotated, §§1531 – 1544;

Compliance: The Applicant's Preferred Alternative was fully evaluated under the Endangered Species Act as part of the NEPA compliance processes associated with an EIS. No listed species continued existence would be jeopardized as a result of the Applicant's Preferred Alternative.

(B) *the activity will cause or contribute, after consideration of dilution and dispersion, to violation of any applicable surface water quality standards established under §501.21 of this title;*

Compliance: The Applicant's Preferred Alternative would comply with all State and Federal water quality standards; a 404(b)(1) evaluation has been prepared for this project and will be submitted to the agencies for review and concurrence.

(C) *the activity violates any applicable toxic effluent standard or prohibition established under §501.21 of this title;*

Compliance: The Applicant's Preferred Alternative would comply with all State and Federal water quality standards; sediment sampling indicates no constituents of concern are present.

(D) *the activity violates any requirement imposed to protect a marine sanctuary designated under the Marine Protection, Research, and Sanctuaries Act of 1972, 33 United States Code Annotated, Chapter 27; or*

Compliance: The Applicant's Preferred Alternative would not affect any marine sanctuaries.

(E) *taking into account the nature and degree of all identifiable adverse effects, including their persistence, permanence, areal extent, and the degree to which these effects will have been mitigated pursuant to subsections (c) and (d) of this section, the activity will, individually or collectively, cause or contribute to significant adverse effects on:*

(i) *human health and welfare, including effects on water supplies, plankton, benthos, fish, shellfish, wildlife, and consumption of fish and wildlife;*

(ii) *the life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, or spread of pollutants or their byproducts beyond the site, or their introduction into an ecosystem, through biological, physical, or chemical processes;*

- (iii) *ecosystem diversity, productivity, and stability, including loss of fish and wildlife habitat or loss of the capacity of a coastal wetland to assimilate nutrients, purify water, or reduce wave energy; or*
- (iv) *generally accepted recreational, aesthetic or economic values of the critical area which are of exceptional character and importance.*

Compliance: Discharges within CNRAs are intended to restore eroded and storm-damaged areas. Placement actions include restoration of eroded shorelines, PA levee improvement and fill, repair of storm-damaged shorelines, and potential beach nourishment through direct placement and nearshore berms. These actions target BU and were preferred over offshore disposal or other alternatives with less contribution to CNRA function and value. Compliance with State and Federal regulations and use of BMPs would avoid and minimize impacts.

- (b) *The TCEQ and the RRC shall comply with the policies in this section when issuing certifications and adopting rules under Texas Water Code, Chapter 26, and the Texas Natural Resources Code, Chapter 91, governing certification of compliance with surface water quality standards for federal actions and permits authorizing development affecting critical areas; provided that activities exempted from the requirement for a permit for the discharge of dredged or fill material, described in Code of Federal Regulations, Title 33, §323.4 and/or Code of Federal Regulations, Title 40, §232.3, including but not limited to normal farming, silviculture, and ranching activities, such as plowing, seeding, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices, shall not be considered activities for which a certification is required. The GLO and the SLB shall comply with the policies in this section when approving oil, gas, or other mineral lease plans of operation or granting surface leases, easements, and permits and adopting rules under the Texas Natural Resources Code, Chapters 32, 33 and 51–53, and Texas Water Code, Chapter 61, governing development affecting critical areas on state submerged lands and private submerged lands, and when issuing approvals and adopting rules under Texas Natural Resources Code, Chapter 221, for mitigation banks operated by subdivisions of the state.*

Compliance: The Applicant’s Preferred Alternative would comply with all State and Federal water quality standards. This project does not involve agricultural actions, oil and gas activities, or the establishment of a mitigation bank.

- (c) *Agencies required to comply with this section will coordinate with one another and with federal agencies when evaluating alternatives, determining appropriate and practicable mitigation, and assessing significant degradation. Those agencies' rules governing authorizations for development in critical areas shall require a demonstration that the requirements of subsection (a)(1)–(7) of this section have been satisfied.*

Compliance: The Applicant's Preferred Alternative is being evaluated by State and Federal agencies, and the public, through the NEPA compliance processes associated with an EIS. Potential cumulative effects with past, present, and reasonably foreseeable actions on CNRAs may be beneficial in nature as the PAs for the Applicant's Preferred Alternative include placement activities that target restoration of eroded and storm damaged CNRAs. Compliance with State and Federal regulations and use of BMPs would avoid and minimize impacts.

- (d) *For any dredging or construction of structures in, or discharge of dredged or fill material into, critical areas that is subject to the requirements of §501.15 of this title (relating to Policy for Major Actions), data and information on the cumulative and secondary adverse effects of the project need not be produced or evaluated to comply with this section if such data and information is produced and evaluated in compliance with §501.15(b)–(c) of this title.*

Compliance: The Applicant's Preferred Alternative is a Federal action that includes the preparation of an EIS under NEPA. All plan formulations included coordination with an interagency team consisting of State and Federal agencies. The project would comply with the goals and policies of this chapter. Cumulative and secondary impacts were evaluated in Section 501.15(b)–(c) of this compliance document.

3.3 SECTION 501.24 – POLICIES FOR CONSTRUCTION OF WATERFRONT FACILITIES AND OTHER STRUCTURES ON SUBMERGED LANDS

- (a) *Development on submerged lands shall comply with the policies in this section.*
- (14) *Nonstructural erosion response methods such as beach nourishment, sediment bypassing, nearshore sediment berms, and planting of vegetation shall be preferred instead of structural erosion response methods.*
- (17) *Erosion of Gulf beaches and coastal shore areas caused by construction or modification of jetties, breakwaters, groins, or shore stabilization projects shall be mitigated to the extent the costs of mitigation are reasonably proportionate to the benefits of mitigation. Factors that shall be considered in determining whether the costs of mitigation are reasonably proportionate to the cost of the construction or modification and benefits include, but are not limited to, environmental benefits, recreational benefits, flood or storm protection benefits, erosion prevention benefits, and economic development benefits.*
- (b) *To the extent applicable to the public beach, the policies in this section are supplemental to any further restrictions or requirements relating to the beach access and use rights of the public.*

Compliance: The Applicant's Preferred Alternative is being evaluated by State and Federal agencies, and the public, through the NEPA compliance processes associated with an EIS. Placement areas for the Applicant's Preferred Alternative include placement activities that target restoration of eroded and storm damaged CNRAs. Compliance with State and Federal regulations and use of BMPs would avoid and minimize impacts. Shore stabilization under the Applicant's Preferred Alternative are all either reconstruction and armoring of already-eroded shorelines, and beach nourishment. No jetties, breakwaters, or groins are being constructed or altered.

3.4 SECTION 501.25 – DREDGING AND DREDGED MATERIAL DISPOSAL AND PLACEMENT

(a) *Dredging and the disposal and placement of dredged material shall avoid and otherwise minimize adverse effects to coastal waters, submerged lands, critical areas, coastal shore areas, and Gulf beaches to the greatest extent practicable. The policies of this section are supplemental to any further restrictions or requirements relating to the beach access and use rights of the public. In implementing this section, cumulative and secondary adverse effects of dredging and the disposal and placement of dredged material and the unique characteristics of affected sites shall be considered.*

Compliance: Discharges within CNRAs are intended to restore eroded and storm-damaged areas. Placement actions include restoration of eroded shorelines, PA levee improvement and fill, repair of storm-damaged shorelines, and potential beach nourishment through direct placement and nearshore berms. These actions target BU and were preferred over offshore disposal or other alternatives with less contribution to CNRA function and value. Compliance with State and Federal regulations and use of BMPs would avoid and minimize impacts. Although there may be temporary and localized impacts to access during direct beach nourishment activities, long-term impact is beneficial to beach users.

(1) *Dredging and dredged material disposal and placement shall not cause or contribute, after consideration of dilution and dispersion, to violation of any applicable surface water quality standards established under §501.21 of this title.*

Compliance: The Applicant's Preferred Alternative would comply with all State and Federal water quality standards; a 404(b)1 evaluation has been prepared for this project and will be submitted to the agencies for review and concurrence. Sediment sampling indicated no adverse environmental effects would be expected. Sediment sampling results showed Texas Surface Water Quality (acute) Standards were exceeded for copper in in two water samples from different locations in the Outer Channel.

(2) *Except as otherwise provided in paragraph (4) of this subsection, adverse effects on critical areas from dredging and dredged material disposal or placement shall be avoided and*

otherwise minimized, and appropriate and practicable compensatory mitigation shall be required, in accordance with §501.23 of this title.

Compliance: Discharges within CNRAs are intended to restore eroded and storm-damaged areas. Placement actions include restoration of eroded shorelines, PA levee improvement and fill, repair of storm-damaged shorelines, and potential beach nourishment through direct placement and nearshore berms. These actions target BU and were preferred over offshore disposal or other alternatives with less contribution to CNRA function and value. Compliance with State and Federal regulations and use of BMPs would avoid and minimize impacts.

- (3) *Except as provided in paragraph (4) of this subsection, dredging and the disposal and placement of dredged material shall not be authorized if:*
- (A) *there is a practicable alternative that would have fewer adverse effects on coastal waters, submerged lands, critical areas, coastal shore areas, and Gulf beaches, so long as that alternative does not have other significant adverse effects;*
 - (B) *all appropriate and practicable steps have not been taken to minimize adverse effects on coastal waters, submerged lands, critical areas, coastal shore areas, and Gulf beaches; or*
 - (C) *significant degradation of critical areas under §501.23(a)(7)(E) of this title would result.*

Compliance: Several practicable alternatives were evaluated in context of the Applicant's purpose and need, and the Applicant's Preferred Alternative included avoidance and minimization, proposed mitigation, and BU of dredged material. Although temporary impacts to CNRAs would occur during construction, BU material discharged within CNRAs are intended to restore eroded and storm-damaged areas. Placement actions include restoration of eroded shorelines, PA levee improvement and fill, repair of storm-damaged shorelines, and potential beach nourishment through direct placement and nearshore berms. These actions target BU and were preferred over offshore disposal or other alternatives with less contribution to, and improvement of CNRA function and value. Compliance with State and Federal regulations and use of BMPs would avoid and minimize impacts.

- (4) *A dredging or dredged material disposal or placement project that would be prohibited solely by application of paragraph (3) of this subsection may be allowed if it is determined to be of overriding importance to the public and national interest in light of economic impacts on navigation and maintenance of commercially navigable waterways.*

Compliance: The proposed dredging and disposal is not prohibited by paragraph (3). Discharges within CNRAs are intended to restore eroded and storm-damaged areas. Placement actions include restoration of eroded shorelines, PA levee improvement and fill, repair of storm-damaged shorelines,

and potential beach nourishment through direct placement and nearshore berms. These actions target BU and were preferred over offshore disposal or other alternatives with less contribution to CNRA function and value. Compliance with State and Federal regulations and use of BMPs would avoid and minimize impacts.

(b) *Adverse effects from dredging and dredged material disposal and placement shall be minimized as required in subsection (a) of this section. Adverse effects can be minimized by employing the techniques in this subsection where appropriate and practicable.*

(1) *Adverse effects from dredging and dredged material disposal and placement can be minimized by controlling the location and dimensions of the activity. Some of the ways to accomplish this include:*

(A) *locating and confining discharges to minimize smothering of organisms;*

(B) *locating and designing projects to avoid adverse disruption of water inundation patterns, water circulation, erosion and accretion processes, and other hydrodynamic processes;*

(C) *using existing or natural channels and basins instead of dredging new channels or basins, and discharging materials in areas that have been previously disturbed or used for disposal or placement of dredged material;*

(D) *limiting the dimensions of channels, basins, and disposal and placement sites to the minimum reasonably required to serve the project purpose, including allowing for reasonable overdredging of channels and basins, and taking into account the need for capacity to accommodate future expansion without causing additional adverse effects;*

(E) *discharging materials at sites where the substrate is composed of material similar to that being discharged;*

(F) *locating and designing discharges to minimize the extent of any plume and otherwise control dispersion of material; and*

(G) *avoiding the impoundment or drainage of critical areas.*

Compliance: Discharges are specifically located for BU actions intended to improve damaged CNRAs or mitigate for impacts. Hydrodynamic modeling was performed as part of the project planning and many of the BU actions would address eroded shorelines. The Applicant's Preferred Alternative includes an existing channel for proposed deepening that is routinely maintained currently, and is the minimum needed to meet the Applicant's purpose and need. Discharges within CNRAs are intended to restore eroded and storm-damaged areas and would use appropriate material to reflect

similar substrates. BMPs would be implemented to maintain State and Federal water quality standards. No impoundment of CNRAs would result.

- (2) *Dredging and disposal and placement of material to be dredged shall comply with applicable standards for sediment toxicity. Adverse effects from constituents contained in materials discharged can be minimized by treatment of or limitations on the material itself. Some ways to accomplish this include:*
- (A) *disposal or placement of dredged material in a manner that maintains physiochemical conditions at discharge sites and limits or reduces the potency and availability of pollutants;*
 - (B) *limiting the solid, liquid, and gaseous components of material discharged;*
 - (C) *adding treatment substances to the discharged material; and*
 - (D) *adding chemical flocculants to enhance the deposition of suspended particulates in confined disposal areas.*

Compliance: The Applicant's Preferred Alternative would comply with all State and Federal water quality standards and sediment sampling indicate no adverse environmental effects would be expected.

- (3) *Adverse effects from dredging and dredged material disposal or placement can be minimized through control of the materials discharged. Some ways of accomplishing this include:*
- (A) *use of containment levees and sediment basins designed, constructed, and maintained to resist breaches, erosion, slumping, or leaching;*
 - (B) *use of lined containment areas to reduce leaching where leaching of chemical constituents from the material is expected to be a problem;*
 - (C) *capping in-place contaminated material or, selectively discharging the most contaminated material first and then capping it with the remaining material;*
 - (D) *properly containing discharged material and maintaining discharge sites to prevent point and nonpoint pollution; and*
 - (E) *timing the discharge to minimize adverse effects from unusually high water flows, wind, wave, and tidal actions.*

Compliance: Containment and other BMPs would be used when possible to avoid and minimize impacts. Standard marine construction techniques to build PA shoreline restoration containment dikes would be used, such as discharge line baffles and spill barges to control material placement. Similar techniques to construct training berms during beach nourishment, would be employed, as previous nourishment events used in the area.

- (4) *Adverse effects from dredging and dredged material disposal or placement can be minimized by controlling the manner in which material is dispersed. Some ways of accomplishing this include:*
- (A) *where environmentally desirable, distributing the material in a thin layer;*
 - (B) *orienting material to minimize undesirable obstruction of the water current or circulation patterns;*
 - (C) *using silt screens or other appropriate methods to confine suspended particulates or turbidity to a small area where settling or removal can occur;*
 - (D) *using currents and circulation patterns to mix, disperse, dilute, or otherwise control the discharge;*
 - (E) *minimizing turbidity by using a diffuser system or releasing material near the bottom;*
 - (F) *selecting sites or managing discharges to confine and minimize the release of suspended particulates and turbidity and maintain light penetration for organisms; and*
 - (G) *setting limits on the amount of material to be discharged per unit of time or volume of receiving waters.*

Compliance: Containment and other BMPs (including potentially turbidity curtains) would be used to avoid and minimize impacts, when appropriate and practicable.

- (5) *Adverse effects from dredging and dredged material disposal or placement operations can be minimized by adapting technology to the needs of each site. Some ways of accomplishing this include:*
- (A) *using appropriate equipment, machinery, and operating techniques for access to sites and transport of material, including those designed to reduce damage to critical areas;*

- (B) *having personnel on site adequately trained in avoidance and minimization techniques and requirements; and*
- (C) *designing temporary and permanent access roads and channel spanning structures using culverts, open channels, and diversions that will pass both low and high-water flows, accommodate fluctuating water levels, and maintain circulation and faunal movement.*

Compliance: Appropriate equipment, personnel training, and consideration of flows and circulation patterns would be involved with construction practices and behaviors.

- (6) *Adverse effects on plant and animal populations from dredging and dredged material disposal or placement can be minimized by:*
 - (A) *avoiding changes in water current and circulation patterns that would interfere with the movement of animals;*
 - (B) *selecting sites or managing discharges to prevent or avoid creating habitat conducive to the development of undesirable predators or species that have a competitive edge ecologically over indigenous plants or animals;*
 - (C) *avoiding sites having unique habitat or other value, including habitat of endangered species;*
 - (D) *using planning and construction practices to institute habitat development and restoration to produce a new or modified environmental state of higher ecological value by displacement of some or all of the existing environmental characteristics;*
 - (E) *using techniques that have been demonstrated to be effective in circumstances similar to those under consideration whenever possible and, when proposed development and restoration techniques have not yet advanced to the pilot demonstration stage, initiating their use on a small scale to allow corrective action if unanticipated adverse effects occur;*
 - (F) *timing dredging and dredged material disposal or placement activities to avoid spawning or migration seasons and other biologically critical time periods; and*
 - (G) *avoiding the destruction of remnant natural sites within areas already affected by development.*

Compliance: Discharges within CNRAs are intended to restore eroded and storm-damaged areas. Placement actions include restoration of eroded shorelines, PA levee improvement and fill, repair of storm-damaged shorelines, and potential beach nourishment through direct placement and

nearshore berms. These actions target BU and were preferred over offshore disposal or other alternatives with less contribution to CNRA function and value. Compliance with State and Federal regulations and use of BMPs would avoid and minimize impacts.

- (7) *Adverse effects on human use potential from dredging and dredged material disposal or placement can be minimized by:*
- (A) *selecting sites and following procedures to prevent or minimize any potential damage to the aesthetically pleasing features of the site, particularly with respect to water quality;*
 - (B) *selecting sites which are not valuable as natural aquatic areas;*
 - (C) *timing dredging and dredged material disposal or placement activities to avoid the seasons or periods when human recreational activity associated with the site is most important; and*
 - (D) *selecting sites that will not increase incompatible human activity or require frequent dredge or fill maintenance activity in remote fish and wildlife areas.*

Compliance: Discharges within CNRAs are intended to restore eroded and storm-damaged areas. Placement actions include restoration of eroded shorelines, PA levee improvement and fill, repair of storm-damaged shorelines, and potential beach nourishment through direct placement and nearshore berms. These actions target BU and were preferred over offshore disposal or other alternatives with less contribution to CNRA function and value. Compliance with State and Federal regulations and use of BMPs would avoid and minimize impacts.

- (8) *Adverse effects from new channels and basins can be minimized by locating them at sites:*
- (A) *that ensure adequate flushing and avoid stagnant pockets; or*
 - (B) *that will create the fewest practicable adverse effects on coastal natural resource areas (CNRAs) from additional infrastructure such as roads, bridges, causeways, piers, docks, wharves, transmission line crossings, and ancillary channels reasonably likely to be constructed as a result of the project; or*
 - (C) *with the least practicable risk that increased vessel traffic could result in navigation hazards, spills, or other forms of contamination which could adversely affect CNRAs;*
 - (D) *provided that, for any dredging of new channels or basins subject to the requirements of §501.15 of this title (relating to Policy for Major Actions), data and information on minimization of secondary adverse effects need not be*

produced or evaluated to comply with this paragraph if such data and information is produced and evaluated in compliance with §501.15(b)(1) of this title.

Compliance: Circulation modeling indicated no impacts of the Applicant's Preferred Alternative, and the channel deepening would occur to limit or stagnate flow and flushing within the extents of the existing channel. Vessel traffic may be reduced, and proper navigation safety requirements would be in place. Discharges within CNRAs are intended to restore eroded and storm-damaged areas. Placement actions include restoration of eroded shorelines, PA levee improvement and fill, repair of storm-damaged shorelines, and potential beach nourishment through direct placement and nearshore berms. These actions target BU and were preferred over offshore disposal or other alternatives with less contribution to CNRA function and value. Compliance with State and Federal regulations and use of BMPs would avoid and minimize impacts.

(c) Disposal or placement of dredged material in existing contained dredge disposal sites identified and actively used as described in an environmental assessment or environmental impact statement issued prior to the effective date of this chapter shall be presumed to comply with the requirements of subsection (a) of this section unless modified in design, size, use, or function.

Compliance: The Applicant's Preferred Alternative includes PA levee repair and fill, and the Applicant's Preferred Alternative is being evaluated by the EIS.

(d) Dredged material from dredging projects in commercially navigable waterways is a potentially reusable resource and must be used beneficially in accordance with this policy.

(1) If the costs of the beneficial use of dredged material are reasonably comparable to the costs of disposal in a non-beneficial manner, the material shall be used beneficially.

(2) If the costs of the beneficial use of dredged material are significantly greater than the costs of disposal in a non-beneficial manner, the material shall be used beneficially unless it is demonstrated that the costs of using the material beneficially are not reasonably proportionate to the costs of the project and benefits that will result. Factors that shall be considered in determining whether the costs of the beneficial use are not reasonably proportionate to the benefits include, but are not limited to:

(A) environmental benefits, recreational benefits, flood or storm protection benefits, erosion prevention benefits, and economic development benefits;

(B) the proximity of the beneficial use site to the dredge site; and

(C) the quantity and quality of the dredged material and its suitability for beneficial use.

(3) Examples of the beneficial use of dredged material include, but are not limited to:

- (A) *projects designed to reduce or minimize erosion or provide shoreline protection;*
- (B) *projects designed to create or enhance public beaches or recreational areas;*
- (C) *projects designed to benefit the sediment budget or littoral system;*
- (D) *projects designed to improve or maintain terrestrial or aquatic wildlife habitat;*
- (E) *projects designed to create new terrestrial or aquatic wildlife habitat, including the construction of marshlands, coastal wetlands, or other critical areas;*
- (F) *projects designed and demonstrated to benefit benthic communities or aquatic vegetation;*
- (G) *projects designed to create wildlife management areas, parks, airports, or other public facilities;*
- (H) *projects designed to cap landfills or other waste disposal areas;*
- (I) *projects designed to fill private property or upgrade agricultural land, if cost-effective public beneficial uses are not available; and*
- (J) *projects designed to remediate past adverse impacts on the coastal zone.*

Compliance: Discharges within CNRAs are intended to restore eroded and storm-damaged areas. Placement actions include restoration of eroded shorelines, PA levee improvement and fill, repair of storm-damaged shorelines, and potential beach nourishment through direct placement and nearshore berms. These actions target BU and were preferred over offshore disposal or other alternatives with less contribution to CNRA function and value. Compliance with State and Federal regulations and use of BMPs would avoid and minimize impacts.

- (e) *If dredged material cannot be used beneficially as provided in subsection (d)(2) of this section to avoid and otherwise minimize adverse effects as required in subsection (a) of this section, preference will be given to the greatest extent practicable to disposal in:*
 - (1) *contained upland sites;*
 - (2) *other contained sites; and*
 - (3) *open water areas of relatively low productivity or low biological value.*

Compliance: Discharges within CNRAs are intended to restore eroded and storm-damaged areas. Placement actions include restoration of eroded shorelines, PA levee improvement and fill, repair of storm-damaged shorelines, and potential beach nourishment through direct placement and

nearshore berms. These actions target BU and were preferred over offshore disposal or other alternatives with less contribution to CNRA function and value. Compliance with State and Federal regulations and use of BMPs would avoid and minimize impacts.

- (f) *For new sites, dredged materials shall not be disposed of or placed directly on the boundaries of submerged lands or at such location so as to slump or migrate across the boundaries of submerged lands in the absence of an agreement between the affected public owner and the adjoining private owner or owners that defines the location of the boundary or boundaries affected by the deposition of the dredged material.*

Compliance: Containment and other BMPs would be used when possible to prevent sediment movements. Proper engineering design of slopes would also prevent slumping.

3.5 SECTION 501.26 – POLICIES FOR CONSTRUCTION IN THE BEACH/DUNE SYSTEM

- a) *Construction in critical dune areas or areas adjacent to or on Gulf beaches shall comply with the following policies:*
- (4) *Non-structural erosion response methods such as beach nourishment, sediment bypassing, nearshore sediment berms, and planting of vegetation shall be preferred instead of structural erosion response methods. Subdivisions shall not authorize the construction of a new erosion response structure within the beach/dune system, except as provided by subsection (b) of this section or a retaining wall located more than 200 feet landward of the line of vegetation. Subdivisions shall not authorize the enlargement, improvement, repair or maintenance of existing erosion response structures on the public beach. Subdivisions shall not authorize the repair or maintenance of existing erosion response structures within 200 feet landward of the line of vegetation except as provided in §15.6(d) of this title (relating to Concurrent Dune Protection and Beachfront Construction Standards).*

Compliance: The Applicant's Preferred Alternative includes placement activities consisting of beach nourishment that would have positive impacts in terms of maintaining coastal barriers. Dredged material from channel deepening would be used beneficially for nearshore berms for potential beach nourishment along San José and Mustang islands. Actions include direct placement beaches and nearshore berms.

3.6 SECTION 501.27 – POLICIES FOR DEVELOPMENT IN COASTAL HAZARD AREAS

- b) *Pursuant to the standards and procedures under the Texas Natural Resources Code, Chapter 33, Subchapter H, the GLO shall adopt or issue rules, recommendations, standards, and guidelines for erosion avoidance and remediation and for prioritizing critical erosion areas.*

Compliance: Discharges within CNRAs are intended to restore eroded and storm-damaged areas. Placement actions include restoration of eroded shorelines, PA levee improvement and fill, repair of storm-damaged shorelines, and potential beach nourishment through direct placement and nearshore berms. These actions target BU and were preferred over offshore disposal or other alternatives with less contribution to CNRA function and value. Compliance with State and Federal regulations and use of BMPs would avoid and minimize impacts.

3.7 SECTION 501.28 – POLICIES FOR DEVELOPMENT WITHIN COASTAL BARRIER RESOURCE SYSTEM UNITS AND OTHERWISE PROTECTED AREAS ON COASTAL BARRIERS

- a) *Development of new infrastructure or major repair of existing infrastructure within or supporting development within Coastal Barrier Resource System Units and Otherwise Protected Areas designated on maps dated October 24, 1990, as those maps may be modified, revised, or corrected, under the Coastal Barrier Resources Act, 16 United States Code Annotated, §3503(a), shall comply with the policies in this section.*
- (4) *Where practicable, infrastructure shall be located in existing rights-of-way or previously disturbed areas to avoid or minimize adverse effects within Coastal Barrier Resource System Units or Otherwise Protected Areas.*
- (5) *Development of infrastructure shall occur at sites and times selected to have the least adverse effects practicable within Coastal Barrier Resource System Units or Otherwise Protected Areas on critical areas, critical dunes, Gulf beaches, and washover areas and on spawning or nesting areas or seasonal migrations of commercial, recreational, threatened, or endangered terrestrial or aquatic wildlife.*

Compliance: The Applicant's Preferred Alternative includes placement actions that would be constructed within Coastal Barrier Resources Act Units on San José Island (Unit: T08), in the form of beach restoration. placement actions are intended to have long-term benefits to the overall ecology of the coast. The Applicant's Preferred Alternative includes placement activities consisting of beach nourishment that would have positive impacts in terms of maintaining coastal barriers. Dredged material from channel deepening would be used beneficially for nearshore berms for potential beach

nourishment along San José and Mustang islands. Actions include direct placement beaches and nearshore berms.

- b) *TCEQ rules and approvals for the creation of special districts and for infrastructure projects funded by issuance of bonds by water, sanitary sewer, and wastewater drainage districts under Texas Water Code, Chapters 49, 50, and 59; water control and improvement districts under Texas Water Code, Chapter 50; municipal utility districts under Texas Water Code, Chapter 54; regional plan implementation agencies under Texas Water Code, Chapter 54; special utility districts under Texas Water Code, Chapter 65; stormwater control districts under Texas Water Code, Chapter 66; and all other general and special law districts subject to and within the jurisdiction of the TCEQ, shall comply with the policies in this section. TxDOT rules and approvals under Texas Transportation Code Chapter 201, et seq., governing planning, design, construction, and maintenance of transportation projects, shall comply with the policies in this section.*

Compliance: The Applicant's Preferred Alternative would comply with all applicable State and Federal regulations and requirements.

3.8 SECTION 501.32 – POLICIES FOR EMISSION OF AIR POLLUTANTS

- a) *TCEQ rules under Texas Health and Safety Code, Chapter 382, governing emissions of air pollutants, shall comply with regulations at Code of Federal Regulations, Title 40, adopted pursuant to the Clean Air Act, 42 United States Code Annotated, §§7401, et seq, to protect and enhance air quality in the coastal area so as to protect CNRAs and promote the public health, safety, and welfare.*

Compliance: The Applicant's Preferred Alternative would comply with all applicable State and Federal regulations and requirements.

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4.0 REFERENCES

- Mott MacDonald. 2021. Waters and Wetlands Delineation Report for Five Beneficial Use Sites – Corpus Christi Ship Channel Deepening Project, Port of Corpus Christi Authority, Corpus Christi Ship Channel, Aransas and Nueces Counties, Texas. October 2021.
- . 2022. Draft Waters and Wetlands Delineation Report for the San José Island Beneficial Use Site – Corpus Christi Ship Channel Deepening Project, Port of Corpus Christi Authority, Corpus Christi Ship Channel, Aransas County, Texas. January 2022.
- Texas General Land Office (GLO). 2021. Coastal Resources Mapping Viewer. <https://cgis.glo.texas.gov/rmc/index.html>. Accessed June 24, 2021.
- Triton Environmental Solutions, LLC. 2021. Aquatic Survey Report Port of Corpus Christi Authority Channel Deepening Project, Nueces and Aransas Counties, Texas, SWG-2019-00067. Prepared for the Port of Corpus Christi Authority. October 29, 2021.
- . 2022. Draft Aquatic Survey Report San José Island Beneficial Use Site, Port of Corpus Christi Authority Channel Deepening Project, Aransas County, Texas, SWG-2019-00067. Prepared for the Port of Corpus Christi Authority. January 18, 2022.
- W.F. Baird and Associates, Ltd. 2022. Environmental Impact Assessment for Channel Deepening, Port of Corpus Christi – Hydrodynamic and Salinity Modeling Study. Prepared for Freese and Nichols, Inc. March 17, 2022.

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