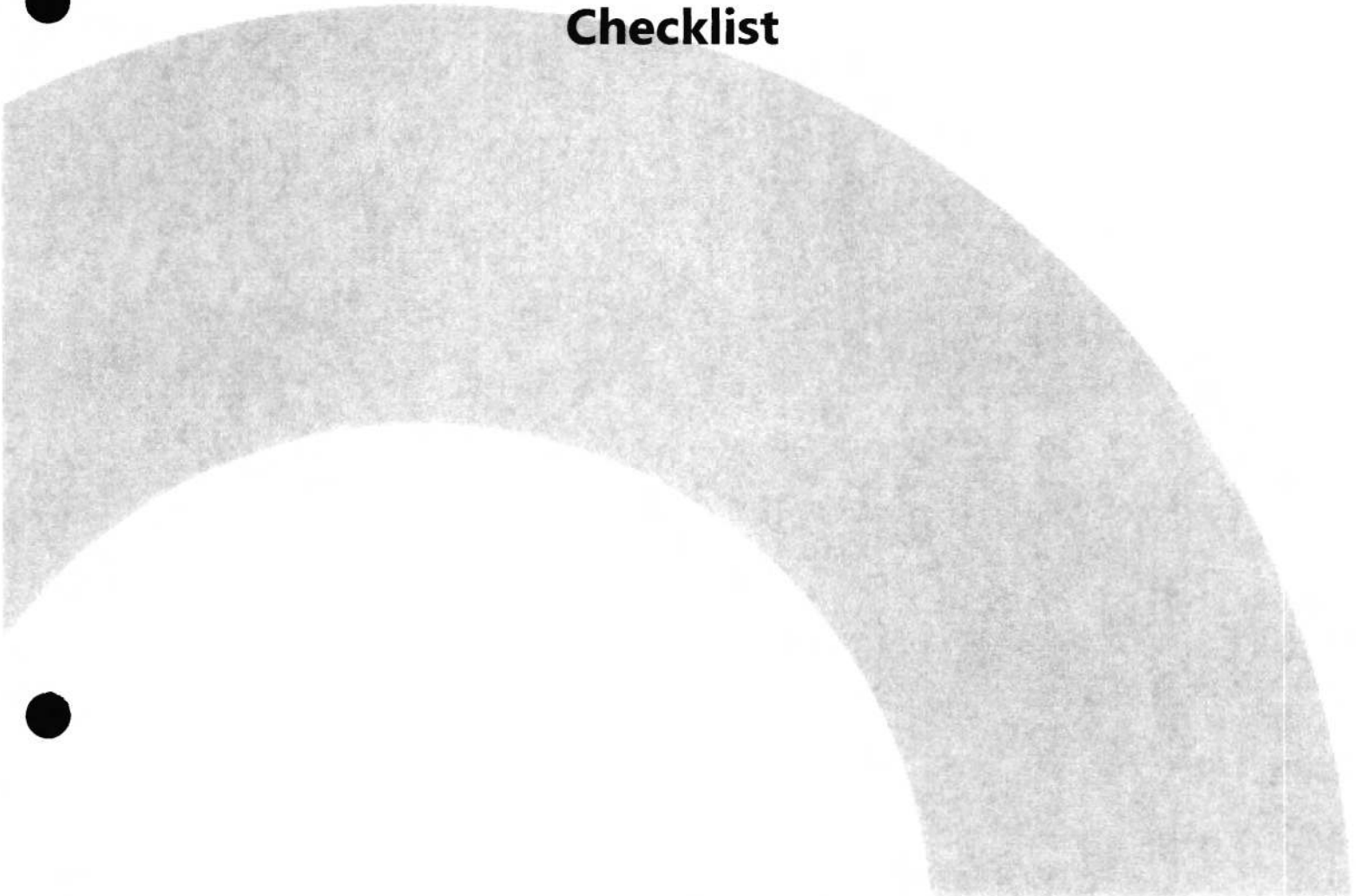


**Appendix I**

**Texas Commission on Environmental  
Quality Tier II 401 Certification  
Questionnaire and Alternatives Analysis  
Checklist**



## Tier II 401 Certification Questionnaire and Alternatives Analysis Checklist

Does your project meet Texas' water quality standards?

The Texas Commission on Environmental Quality (TCEQ) must consider this question for all proposed projects seeking a Section 404 dredge and fill permit.

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One of the requirements for obtaining a Corps of Engineers Section 404 permit is certification from the TCEQ that the permit will comply with State water quality standards. This requirement is authorized by Section 401 of the Federal Clean Water Act, and is therefore referred to as 401 certification.

The attached 401 certification questionnaire must be submitted in order for the TCEQ to determine whether or not a project should be granted 401 certification. Please note that the information requested in this questionnaire is not required in order for a Section 404 application to be considered administratively complete by the Corps of Engineers. However, failure to provide this information (including the Alternatives Analysis Checklist) to the TCEQ (within 30 days of the public notice) may cause your project to be denied 401 certification without prejudice.

### What do you need to submit to TCEQ?

1. A completed 401 certification questionnaire.

*A completed 401 certification questionnaire is attached.*

2. A completed Alternatives Analysis Checklist (if your project affects surface water in the State, including wetlands)

*A completed Alternatives Analysis Checklist is attached.*

3. A map with the location of the project clearly marked (A U.S. Geological Survey (USGS) topographic map strongly recommended)

*A USGS topographic map clearly marked with the dredge project location and dredge material placement area is attached.*

4. Photographs or a video cassette showing the project area and any associated disposal areas (Map and photos should be numbered to show where the photos were taken, and the area covered by each photo)

*Photographs of the dredge location and dredge material placement area are not available. Refer to Appendix C of the combined Section 10 and Section 404 Permit Application for aerial images of the project area.*

### What is involved in review of Section 401 certifications?

1. Filing an application with the Corps starts both the 404 permit and the 401 certification processes
2. A Joint Public Notice is issued by the Corps and the TCEQ after receipt by the Corps of a completed application to inform the public and other government agencies of the proposed activity
  - A 30 day comment period follows
  - The TCEQ may hold a public hearing to consider the potential adverse impacts of the

proposed project on water quality

2. The TCEQ may request additional information from the application, persons submitting comments or requesting a hearing, or other resource agencies
3. A final 401 certification decision will be provided following the end of the comment period.



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

### Tier II 401 Certification Questionnaire

The following questions seek to determine how adverse impacts will be avoided during construction or upon completion of the project. If any of the following questions are not applicable to your project, write NA ("not applicable") and continue.

Please include the applicant's name as it appears on the Corps of Engineers' permit application (and permit number, if known) on all material submitted.

*Applicant:*

*Sarah L. Garza*

*Port of Corpus Christi of Nueces County (PCCA)*

*222 Power Street*

*Corpus Christi, Texas 78401*

The material should be sent to:

Texas Commission on Environmental Quality  
Attn: 401 Coordinator (MC-150)  
P.O. Box 13087  
Austin, TX 78711-3087

#### **I. Impacts to surface water in the State, including wetlands**

- A. What is the area of surface water in the State, including wetlands, that will be disturbed, altered or destroyed by the proposed activity?

PCCA is proposing the construction of two berths requiring dredging and excavation along the southern portion of Harbor Island. The two berths will be inset into Harbor Island at approximate a 45-degree angle. The two berths will be in an area currently occupied by three damaged and unusable berths, which are in the process of being demolished. The new berths will be dredged to a depth of -54 ft mean lower low water (MLLW) to match the current authorized channel. The project area covers approximately 64.8 acres of Terminal Basin.

- B. Is compensatory mitigation proposed? If yes, submit a copy of the mitigation plan. If no, explain why not.





*Compensatory mitigation is not proposed as there will be no net loss of estuarine habitat because of dredging.*

- C. Please complete the attached Alternatives Analysis Checklist.

*The Alternatives Analysis Checklist is attached below.*

## **II. Disposal of waste materials**

- A. Describe the methods for disposing of materials recovered from the removal or destruction of existing structures.

*Debris and other unsuitable materials may be encountered during dredging and construction. Minimal disposal will be required. All material that is not re-useable will be disposed of at a properly permitted facility.*

- B. Describe the methods for disposing of sewage generated during construction. If the proposed work establishes a business or a subdivision, describe the method for disposing of sewage after completing the project.

*Sewage generated during dredging and dredge material placement activities will be collected on ship-board waste facilities or through use of portable toilets placed on land.*

- C. For marinas, describe plans for collecting and disposing of sewage from marine sanitation devices. Also, discuss provisions for the disposing of sewage generated from day-to-day activities.

*NA*

### III. Water quality impacts

- A. Describe the methods to minimize the short-term and long-term turbidity and suspended solids in the waters being dredged and/or filled. Also, describe the type of sediment (sand, clay, etc.) that will be dredged or used for fill.

*No long-term turbidity or suspended solids are anticipated from this project as currents and tidal action will minimize and shorten any sediment suspension. PCCA proposes to incorporate the following conservation measures to minimize the short-term turbidity effects of the project:*

- *All work will occur during an approved in-water work window;*
- *Vessel operators will follow designated speed zones to and from the project site;*
- *Dredge passes will likely start near the shoreline, moving toward deeper water;*
- *During transport and handling of sediment, containment measures will be used to minimize spillage;*
- *PCCA will require the contractor to use a GPS to ensure that material is removed from the correct location;*
- *The contractor will use an appropriate dredging technique for the project such as hydraulic dredging, mechanical dredging, or suction dredging.*
- *The contractor will be allowed to excavate beyond the maximum depth (54 feet below MLLW plus four feet of advanced maintenance and two feet of allowable over dredge);*
- *No bottom stockpiling or multiple bites of the clamshell bucket will be allowed;*
- *Over-dredging at the base of a slope will not occur;*
- *Although not anticipated to be necessary, surface booms, oil-absorbent pads, and similar materials will be on-site to contain any sheen that may occur on the surface of the water during dredging; and*
- *Deployment of a full depth turbidity curtain to minimize turbidity, if necessary.*

*The dredge location sediment is predominantly composed of sand.*

- B. Describe measures that will be used to stabilize disturbed soil areas, including: dredge material mounds, new levees or berms, building sites, and construction work areas. The description should address both short-term (construction related) and long-term (normal operation or maintenance) measures. Typical measures might include containment structures, drainage modifications, sediment fences, or vegetative cover. Special construction techniques intended to minimize soil or sediment disruption should also be described.

*Dredge material will be placed in an authorized dredge material placement area(s). If needed the material would be hydraulically pumped to raise the containment dike at the proposed existing placement area, after which it would be used to fill the interior. After dike construction is required, rip-rap, rock, etc. would be added where armoring is needed, and dike side slopes would be seeded and vegetated as soon as practicable with robust and rapidly establishing species to provide long term stability.*

- C. Discuss how hydraulically dredged materials will be handled to ensure maximum settling of solids before discharging the decant water. Plans should include a calculation of minimum settling times with supporting data (Reference: Technical Report, DS-7810, Dredge Material Research Program, GUIDELINES FOR DESIGNING, OPERATING, AND MAINTAINING DREDGED MATERIAL CONTAINMENT AREAS). If future maintenance dredging will be required, the disposal site should be designed to accommodate additional dredged materials. If not, please include plans for periodically removing the dried sediments from the disposal area.

*Technical Report DS-7810 will be consulted, along with newer United States Army Corps of Engineers (USACE) guidance, to determine exactly how hydraulically dredged materials will be handled to ensure maximum settling of solids before discharging the decant water.*

*At the material placement area, interior training dikes, ditching, and other enhanced dewatering techniques would be employed as necessary to further optimize material retention and dewatering.*

- D. Describe any methods used to test the sediments for contamination, especially when dredging in an area known or likely to be contaminated, such as downstream of municipal or industrial wastewater discharges.

*The material proposed to be dredged will be sampled in accordance with a sampling analysis plan (SAP). The results of the sampling effort will be presented in a document which will discuss the sediment chemistry to support the determination of the material suitability for placement onsite and/or within one or more of the designated existing upland confined DMPA's.*





## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

### Tier II Alternatives Analysis Checklist

#### I. Alternatives

A. How could you satisfy your needs in ways which do not affect surface water in the State?

*This project is water dependent and designed to meet the needs of the demand for the safety and efficiency of vessel movement to Harbor Island. Therefore, there are no alternatives which do not satisfy project objectives without affecting surface waters of the State of Texas. Activities may affect water quality within the proposed project area by temporarily increasing turbidity and suspended sediments load in the estuarine water column. However, these temporary conditions would not be expected to adversely impact marine mammals, essential fish habitat, or other aquatic resources in the project location to a significant degree.*

B. How could the project be re-designed to fit the site without affecting surface water in the State?

*This project is water dependent. Creating new berths cannot be accomplished without affecting surface waters of the State of Texas.*

C. How could the project be made smaller and still meet your needs?

*The number of new berths has been reduced from three to two noting the extreme quantity of dredge material that three berths would have generated.*

D. What other sites were considered?

*No other dredge sites were considered. The proposed maneuvering basin is incorporated in an area where two new shipping berths are being proposed to be built as part of a modernized new crude oil shipping terminal. Of most critical importance is that the Harbor Island location is in an optimal position to be able to accept deep-draft ocean-going ships sized to carry petroleum. The proposed material placement area(s) are already active placement sites; therefore, no other alternative sites were considered.*

1. What geographical area was searched for alternative sites? *NA*
2. How did you determine whether other non-wetland sites are available for development in the area? *NA*
3. In recent years, have you sold or leased any lands located within the vicinity of the project? If so, why were they unsuitable for the project? *NA*





E. What are the consequences of not building the project?

*The purpose of the proposed project is to provide the necessary dock and berthing facilities to support vessel engagement with the loading, unloading, transportation, importing, and exporting of petroleum and other bulk products via waterborne commerce. Construction of the proposed project would provide the facilities necessary to integrate existing barge, pipeline, and storage infrastructure to maximize product handling efficiencies. The No Action alternative would not satisfy PCCAs mission of leveraging commerce to drive prosperity for the region and local communities or the national mission to reduce the trade deficit.*

**II. Comparison of alternatives**

A. How do the costs compare for the alternatives considered above?

*No costs have been estimated at this point. There would be no costs involved with the No Action alternative.*

B. Are there logistical (location, access, transportation, etc.) reasons that limit the alternatives considered?

*No.*

C. Are there technological limitations for the alternatives considered?

*No.*

D. Are there other reasons certain alternatives are not feasible?

*No.*

**III. If you have not chosen an alternative which would avoid impacts to surface water in the State, please explain:**

A. Why your alternative was selected, and

*This proposed action (dredging to a depth of 54 feet below MLLW) was chosen because it is designed to meet the needs of the demand for the safety and efficiency of the growing crude oil export industry while still being financially feasible for PCCA on a channel already authorized to be dredged to 54 feet below MLLW.*

B. What you plan to do to minimize adverse effects on the surface water in the State impacted.

*Although project activities may affect water quality within the proposed project area by*



*temporarily increasing turbidity and suspended sediments load in the estuarine water column, these temporary conditions would not be expected to adversely impact marine mammals, essential fish habitat, or other aquatic resources in the project location to a significant degree. However, PCCA proposes to incorporate the following conservation measures to minimize the short-term turbidity effects of the project:*

- *All work will occur during an approved in-water work window;*
- *Vessel operators will follow designated speed zones to and from the project site;*
- *Dredge passes will likely start near the shoreline, moving toward deeper water;*
- *During transport and handling of sediment, containment measures will be used to minimize spillage;*
- *PCCA will require the contractor to use a GPS to ensure that material is removed from the correct location;*
- *The contractor will use an appropriate dredging technique for the project such as hydraulic dredging, mechanical dredging, or suction dredging.*
- *The contractor will not be allowed to excavate beyond the maximum depth (54 feet below MLLW plus four feet of advanced maintenance and two feet of allowable over dredge);*
- *No bottom stockpiling or multiple bites of the clamshell bucket will be allowed;*
- *Over-dredging at the base of a slope will not occur;*
- *Although not anticipated to be necessary, surface booms, oil-absorbent pads, and similar materials will be on-site to contain any sheen that may occur on the surface of the water during dredging; and*
- *Deployment of a full depth turbidity curtain to minimize turbidity, if necessary.*

**IV.** Please provide a comparison of each criteria (from Part II) for each site evaluation in the alternatives analysis.

*Please see Appendix B of the combined Section 10 and Section 404 Permit Application for more details.*