



PORTCORPUSCHRISTI

June 10, 2019

Mr. Alexander H. Herrgott
Executive Director
Federal Permitting Improvement Steering Council
1800 F St. NW
Washington DC 20405

Subject: FAST-41 Initiation Notice (FIN) for Port of Corpus Christi Authority Channel Deepening Project

Dear Alex,

Enclosed herein are the required details of the Port of Corpus Christi Authority's (Port) Channel Deepening Project for addition to the FAST-41 dashboard.

Project Information: Channel Deepening Project
Ports and Waterways
Navigation Channel Improvement
Port Aransas (Nueces County), Texas

Project Sponsor: Port of Corpus Christi Authority
Sean Strawbridge
Chief Executive Officer
(361) 885-6133
ssrawbridge@pocca.com

Sarah L. Garza
Director of Environmental Planning & Compliance
(361) 885-6163
sarah@pocca.com

Statement of the Purposes and Objectives of the Project: The purpose of the proposed project is to construct a channel with the capability to accommodate transit of fully laden Very Large Crude Carriers (VLCCs) from multiple locations on Harbor Island into the Gulf of Mexico. Factors influencing the Applicant's need for the project include:

- Allow 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,
- Enhance the PCCA's ability to accommodate future growth in energy production, and
- Construct a channel project that the PCCA can readily implement to accommodate industry needs.



Page 2
June 10, 2019
Mr. Herrgott
Federal Permitting Improvement Steering Council

Currently, crude oil is exported using Aframax and Suezmax vessels. The Suezmax vessels are sometimes light loaded (lightered) due to depth restrictions in the existing Corpus Christi Ship Channel (CCSC) and would continue to be light loaded when the current federally-authorized CCSC Improvement Project (54-ft Project) is completed. Reverse lightering translates into additional vessel trips, cost, man hours, operational risk, and air emissions. To efficiently and cost effectively move crude oil cargo, oil exporters are increasingly using fully loaded vessels, including VLCCs. Non-liquid commodity movements are also trending toward larger, more efficient vessels. In order to fulfill its mission of leveraging commerce to drive prosperity in support of national priorities, the PCCA must keep pace with the global marketplace.

The need for the proposed project is driven by the considerations below, which are explained in the following paragraphs:

- Pipelines from Eagle Ford and Permian Basins are being constructed to the Port of Corpus Christi and to Harbor Island. Crude oil terminals are also being planned at Harbor Island using the Federally-authorized 54-ft Project with a -54-foot deep channel that limits the ability to fully load VLCCs, decreasing efficiency by requiring reverse lightering of these vessels.
- Bolstering national energy security through the growth of U.S. crude exports.
- Protecting national economic interests by decreasing the national trade deficit.
- Supporting national commerce by keeping pace with existing and expanded infrastructure being modified or already under development to export crude oil resulting from the large growth in the Permian and Eagle Ford oil field development, which has helped the U.S. recently become the top oil-producing nation in the world.
- Improve safety and efficiency of water-borne freight movements.

The infrastructure and proximity to the major Texas shale plays makes the Port an attractive location for efficiently exporting crude oil by VLCC vessels. The PCCA has received interest from new and existing customers for developing crude oil export terminals and facilities. Production and export of crude oil and natural gas have greatly increased over the years and are providing an economic boom to the Port and the region.

Investments at the PCCA that are directly aimed at product from the Eagle Ford Shale are over \$100 million. In the latter part of July 2018, the PCCA sold more than \$216 million in bonds to fund energy export products. A portion of this money will be used for the authorized deepening of the CCSC, but also will help fund other improvements, including a crude oil export terminal under design at Harbor Island. The new oil export terminals being planned at the Port will have loading arms, handling equipment, storage tanks, and



Page 3
June 10, 2019
Mr. Herrgott
Federal Permitting Improvement Steering Council

other related facilities for larger ships including VLCCs. Similar crude export facilities are being planned by multiple other entities at Harbor Island.

More efficient transport of crude in greater volumes is the impetus for the PCCA to deepen the channel to accommodate fully loaded VLCCs. Presently, the existing channel depth requires that current crude carriers, whether VLCCs or other vessels, not depart fully loaded from the Port, or that VLCCs remain offshore while smaller tankers transfer their cargo to the larger VLCCs, a process known as reverse lightering. The inefficiency of this process is compounded by some of these smaller vessels not being able to be fully loaded while moving through the Port.

Production from the Permian and Eagle Ford basins continues to increase, and several of the major midstream companies are currently undergoing major expansions to facilitate the export of greater volumes of crude. As these exports increase, the number of lightering vessels and product carriers will also increase, adding to shipping delays and congestion inside and outside of the Port. These delays and congestion will increase the cost of transportation, which in turn will increase the cost of crude oil with the ultimate consequence of making U.S. crude less competitive in the global market.

Concise description including general location and/or a summary of geospatial information, if available, and the locations, if any, of environmental, cultural, and historic resources: The proposed project is needed to accommodate transit of fully laden VLCCs that draft approximately 70 feet. The deepening activities would be completed within the footprint of the authorized CCSC channel width. The proposed project does not include widening the channel; however, some minor incidental widening of the channel slopes is expected to meet side slope requirements and to maintain the stability of the channel.

The proposed project consists of the following:

- Deepening from the authorized -54 feet MLLW to approximately -75 feet MLLW, with two feet of advanced maintenance and two feet of allowable overdredge, from Station 110+00 into the Gulf of Mexico to Station -72+50.
- Deepening from the authorized -56 feet MLLW to approximately -77 feet MLLW, with two feet of advanced maintenance and two feet of allowable overdredge, from Station -72+50 to Station -620+00 in the Gulf of Mexico.
- The existing Inner Basin at Harbor Island will be expanded as necessary to allow VLCC turning. This modification will also include a flare transition from the CCSC within Aransas Pass to meet the turning basin expansion.

Page 4
June 10, 2019
Mr. Herrgott
Federal Permitting Improvement Steering Council

The design depths are based on a detailed review of the dimensions of the VLCCs expected to call at the Port's existing and proposed crude oil export terminals; the predominant density of crude oil to be exported and associated vessel drafts; environmental effects due to winds, waves and currents; and required under keel clearances, plus two feet of advanced maintenance and two feet of allowable overdredging depth.

The Port has conducted an extensive analysis of the potentially significant environmental issues, including impacts to water resources, wetlands, vegetation, wildlife, fisheries, land use, recreation, visual resources, socioeconomics, cultural resources, air quality, noise, reliability, safety, and cumulative impacts. The evidence summarized below indicates that the Channel Deepening Project will not result in any significant adverse impacts to the human environment. The evidence also shows long-term positive impacts in several areas, including improved air quality, reduced vessel traffic and positive economic growth.

- Salinity – Results from the three-dimensional modeling of the 54-ft Project and the Channel Deepening Project demonstrate that there will be no significant increase in salinity. The modeling results show an average increase in salinity of less than 0.4 ppt, with a maximum increase of 0.52 ppt or less. This is far less than the 1-2 ppt increase of other recent projects including the Matagorda Ship Channel, Houston Ship Channel, Miami Harbor, Delaware River, Sacramento River, Saint Johns River, Savannah Harbor, and Charleston River.
- Tidal Range & Surge – The results of three-dimensional modeling of the existing conditions, 54-ft Project, and the Channel Deepening Project conditions conclude that there will be no significant adverse impact on tides, currents or water levels. The increase in tidal height would be minimal, equating to less than one-inch in Redfish Bay and less than one-half inch in Aransas, Copano, Corpus Christi, and Nueces Bays during the spring tide period. In other periods, the increase would be even less. This is offset by a decrease in tidal velocity in the entrance channel during spring tides from 5.0 fps to 4.4 fps and overall average slowing from 2.0 fps to 1.7 fps. In the areas of the bays away from the channel, the largest change would be a slight increase of less than 0.5 fps with values less than 0.1 fps prevailing throughout the bays. The average tidal velocities in the bay range from 0.07 fps to 1.67 fps and the peak velocities in the entrance channel and pass range from 0.1 fps to 3.8 fps. These changes would not result in significant adverse impacts on tides, currents, and water levels.
- Water Quality – The Channel Deepening Project is not expected to adversely impact water quality as compared to natural events such as storms, floods and tidal events. During dredging, localized turbidity would

Page 5
June 10, 2019
Mr. Herrgott
Federal Permitting Improvement Steering Council

occur but dissipate within several hours. Data also indicates that the Channel Deepening Project would not negatively influence long-term dissolved oxygen concentrations because the channel is a well-mixed channel with little stratification.

- Contaminated Sediments – The results of the sampling for the 54-ft Project demonstrate that the current surface sediments are not impacted and support offshore disposal. The deeper sediments that would be dredged during the Channel Deepening Project would be even less likely to be contaminated because of the lack of exposure to potential human impacts.
- Vessel Wakes and Erosion – Vessel wake impacts from the Channel Deepening Project are expected to be neutral to positive as compared to the 54-ft Project. After the Channel Deepening Project, maximum bow waves will be essentially unchanged, while drawdown is reduced as a result of the deeper channel. In all cases, the vessel wakes cumulative energy is expected to be minor compared to the natural wind-wave climate.
- Wetlands, Seagrasses, and Oyster Reefs – During dredge material placement in the beneficial use areas, a variety of upland, aquatic habitat, deep open-water habitats, estuarine and tidal marsh habitats would be enhanced or restored. Wetlands, Seagrasses and Oyster Reefs are not present in the existing footprint of the 54-ft Project and therefore would not be present in the Channel Deepening Project.
- Aquatic Fauna and Benthos – Studies indicate recovery to pre-placement conditions will occur in approximately one year from the temporary and short-term impacts to aquatic fauna and benthos which may occur as a result of turbidity during dredging activities. Additionally, there may be some impacts to fauna and benthos as a result of placement of dredged material in beneficial use areas. However, none of these impacts are significant.
- Socioeconomics, Environmental Justice, and Community and Recreational Resources – The Channel Deepening Project will have a positive long-term economic impact on local and State crude oil export activity. The Channel Deepening Project will also result in benefits to community and recreational resources as the overall traffic in the ship channel decreases over time with the use of the VLCCs to replace and/or reduce the need for multiple trips to reverse lighter. Due to the project construction within the existing footprint of the ship channel, no additional recreational and/or community and cultural resource impacts are expected.

Page 6
June 10, 2019
Mr. Herrgott
Federal Permitting Improvement Steering Council

- Air Quality – The Channel Deepening Project will have a positive effect on air quality compared to No Action. Having fewer vessels, reduced or eliminated lightering operations, and onshore loading with vapor control will also reduce air emissions of VOCs and NO_x over time as compared to No Action.
- Noise – Long-term noise levels would continue to decrease over time as the number of ships is reduced by the ability to fully load VLCCs. Temporary noise impacts during the project construction will be similar to the noise levels which already occur during maintenance dredging.
- Visual and Aesthetics – The long-term visual and aesthetic impacts of the project will be positive because the ability to fully load VLCCs will result in a reduction in overall ship traffic. The existence of VLCCs is not a negative impact because lightly loaded VLCCs already traverse the ship channel. The construction of the Channel Deepening Project will not cause additional visual or aesthetic impacts because it will be within the existing footprint of the current ship channel in which maintenance dredging already occurs.
- Essential Fish Habitat – No significant or long-term adverse impact is expected to essential fish habitat. During dredging, temporary or negligible degradation of coastal and estuarine fish habitat may occur as a result of temporary disturbance, displacement of fish species, increased localized turbidity in limited areas, temporary loss of benthic food sources, and limited sediment transport and re-deposition.
- Endangered Species and Critical Habitat – In the long term, construction of beneficial use areas will enhance and restore critical habitat which may incur some short-term impacts during placement of dredged material for beneficial use. Considering the dredging already occurring for maintenance and for the 54-ft Project, and as documented in the Port's applicant-prepared draft biological assessment, any impacts to threatened and endangered species would be both minor and temporary and would be minimized through employment of best practices.
- ODMDS Capacity – The results of the three-dimensional modeling completed for the ODMDS for placement of dredged material from the 54-ft Project and the Channel Deepening Project demonstrate that the planned placement of 20.4 million cubic feet in ODMDS Areas 1 and 2 will not result in any significant adverse impact. The results indicate that there was sufficient transport capacity from waves and currents to disperse the fine fraction of the dredge material, that the dredge volume can be placed with

Page 7
 June 10, 2019
 Mr. Herrgott
 Federal Permitting Improvement Steering Council

an average thickness of 8.7 feet and the maximum thicknesses are not expected to exceed the 11-foot maximum criteria.

- Cultural Resources – Consultation with the U.S. Army Corp of Engineers (USACE) Staff Archeologist has been initiated to examine cultural resources that have been identified as potentially existing within the project footprint at deeper depths. There are unlikely to be any cultural resources beneath -54 feet in the area of the channel subject to prior dredging.
- Cumulative Impacts – No significant cumulative impacts are expected given the nature of foreseeable projects observed to date and the magnitude of the impacts of the proposed project for the major potential resource impacts. Most of the foreseeable projects are landside or single berth projects located beyond the area of the Channel Deepening.

Statement regarding the technical and financial ability of the project sponsor to construct the proposed project:

The Port has partnered with Lone Star Ports, LLC (Lone Star Ports) on this project. Lone Star Ports is held by members of The Carlyle Group (Carlyle), which is a global investment firm with \$222 billion of assets under management across 360 investment vehicles. Founded in 1987 in Washington, DC, Carlyle has grown into one of the world's largest and most successful investment firms, with more than 1,725 professionals operating in 33 offices in North America, South America, Europe, the Middle East, Africa, Asia and Australia. As part of Carlyle, Lone Star Ports has access to deep industry knowledge in business sectors such as energy and power, defense and government services, industrial real estate services and transportation. As the Sponsor, Lone Star Ports has partnered with the Port in an economic arrangement that will provide stable revenue with floor and upside sharing based on performance milestones.

Statement of any Federal Financing, environmental reviews, and authorizations anticipated to be required:

On March 6, 2019, the USACE advised in a letter to the Port that based on their review of our permit application and when considering both context and intensity, they have reasonably arrived at the conclusion that the project may have significant effect on the human environment and, therefore, requires an Environmental Impact Statement (EIS). The USACE would be the lead agency for development of the EIS. However, the effort would require input from other agencies such as National Marine Fisheries Service, U.S. Environmental Protection Agency, and National Oceanic and Atmospheric Administration.

At this time, no Federal Financing is being sought for this project and no authorizations are needed.



Page 8
June 10, 2019
Mr. Herrgott
Federal Permitting Improvement Steering Council

Assessment that the project meets the definition of a covered project as defined in 42 U.S.C. 4370m(6)(A) of the FAST Act and a statement of reasons supporting the assessment:

(6) COVERED PROJECT

(A) In general, the term "covered project" means any activity in the United States that requires authorization or environmental review by a Federal agency involving construction of infrastructure for renewable or conventional energy production, electricity transmission, surface transportation, aviation, ports and waterways, water resource projects, broadband, pipelines, manufacturing, or any other sector as determined by a majority vote of the Council that—

- (i) (I) is subject to NEPA;
(II) is likely to require a total investment of more than \$200,000,000; and
(III) does not qualify for abbreviated authorization or environmental review processes under any applicable law; or
- (ii) is subject to NEPA and the size and complexity of which, in the opinion of the Council, make the project likely to benefit from enhanced oversight and coordination, including a project likely to require—
 - (I) authorization from or environmental review involving more than 2 Federal agencies; or
 - (II) the preparation of an environmental impact statement under NEPA.

The Channel Deepening Project is a Port project involving construction of infrastructure for energy production and requiring environmental review involving multiple Federal agencies. The project is subject to NEPA and the project cost is estimated at \$400 million.

If you have any questions, please do not hesitate to call me (361) 885-6133 or email me at sstrawbridge@pocca.com or Ms. Sarah Garza by phone at (361) 885-6163 or email at sarah@pocca.com.

Sincerely,



Sean Strawbridge
Chief Operating Officer

cc:

- Clark Robertson
- Sarah Garza
- Charles Brittingham, Cassidy & Associates
- Jerry Ashcroft, Lone Star Ports
- Danika Yeager, Lone Star Ports
- Matt Marra, Lone Star Ports





DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
441 G STREET, NW
WASHINGTON, DC 20314-1000

JUN 18 2019

Mr. Sean Strawbridge
Port of Corpus Christi Authority
PO Box 1541
Corpus Christi, Texas 78403

Dear Mr. Strawbridge:

Thank you for your June 13, 2019 submittal of a FAST-41 initiation notice (FIN) on behalf of Port of Corpus Christi Authority (PCCA) for the project referred to as the Channel Deepening Project (CDP) located between stations 110+00 and 620+00 of the Corpus Christi Ship Channel (CCSC) in Port Aransas, Nueces County, Texas.

The U.S. Army Corps of Engineers (Corps) is the lead federal agency for the subject project. As such, I have reviewed your FIN submittal and have determined that your project meets the definition of a covered project. It qualifies for the category of "ports and waterways" pursuant to 42 U.S.C. § 4370m(6)(A) of FAST-41. Further, the project meets the "objective" standard in that it is subject to NEPA, costs more than \$200 million, and not all of the federal reviews and authorizations would be abbreviated.

I have notified Mr. Alex Herrgott, the Executive Director of FAST-41 and the Chief Environmental Review and Permitting Officers from the Environmental Protection Agency, DOI/U.S. Fish and Wildlife Service, DOC/National Marine Fisheries Service, and the U.S. Coast Guard, whose agencies may all have a decision-making role for this project. Your project will be posted to the Federal Dashboard at cms.permits.performance.gov no later than June 27, 2019. Upon posting, the Corps Galveston District will initiate requisite coordination with all identified federal, state, and local agencies and develop a coordinated project plan.

We thank you for your interest in and commitment to the FAST-41 process. The district will be contacting your team to discuss the process in more detail. Should you have any questions in the interim, please contact Mr. Robert Heinly, Acting Chief of the Regulatory Division in the Galveston District, at robert.w.heinly@usace.army.mil or (409) 766-3992.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas P. Smith".

Thomas P. Smith, P.E.
Chief, Operations and Regulatory Division
Environmental Review and Permitting Officer
Directorate of Civil Works