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. 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?

Enterprise Response
There are approximately 12.6 acres of open water currently permitted within the existing Morgan's Point Wharf 8 (MP8) facility. No additional acreage is being sought. Silt blade contouring is proposed for all berthing areas associated with SWG-2014-00905 that may require maintenance activities.

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

Enterprise Response
Wetland mitigation is not proposed due to the nature of impacts within open waters contained within the facility's existing permitted (SWG-2014-00905) site.

C. Please complete the attached Alternatives Analysis Checklist.

Enterprise Response
Please see the responses below.

II. Disposal of waste materials

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

Enterprise Response
Silt blade activities will not require destruction or removal of existing structures, therefore, disposal is not applicable.

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.

Enterprise Response
Morgan's Point Dock 8 is an existing facility currently tied into existing municipal wastewater infrastructure. Under the proposed permit amendment, any sewage generated from construction barges during silt blade contouring would be disposed of by the selected marine construction contractors, in accordance with local, state, and federal regulations.

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.

Enterprise Response
Morgan's Point Dock 8 is an existing, non-public, industrial ship loading facility currently tied into existing municipal wastewater infrastructure for the disposal of sewage generated from day-to-day activities. Furthermore, under the proposed permit amendment, any sewage generated from construction barges during silt blade contouring would be disposed of by the selected marine construction contractors, in accordance with local, state, and federal regulations.

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.

Enterprise Response
Enterprise would employ best management practices to reduce turbidity, total suspended solids, and particulate matter in the water during silt blade contouring events. Unconsolidated sediments such as silt and sands would be encountered during silt blade contouring activities.

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.

Enterprise Response
Above-water and shoreward stabilization is not applicable. Silt blade contouring is an underwater dredging technique that involves the redistribution of bottom sediments by spreading material from one area to another in order to achieve target depths (i.e. from high spots to fill in low spots). Silt blade bottom contouring will be used to contour the bottom elevation of berthing areas and along side slopes of the docking structure. Silt blading reduces maintenance dredging frequency and required disposal of that material into dredged material placement areas (DMPA), many of which already have limited capacity and availability.

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.

Enterprise Response
Enterprise currently has UASCE permit authorization for maintenance dredging. On January 13, 2020, the TCEQ issued a 401 WQC, that included additional DMPA's referenced within the USACE-issued permit on January 7, 2020. Hydraulic maintenance dredging will continue to adhere to stipulations outlined in existing permits.

However, this permit amendment is applicable to adding silt blading as a dredge technique, which is not a hydraulic dredge technique and does not require deposition of dredge material into DMPAs.

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.

Enterprise Response

Enterprise would adhere to approved methodology described in the Sampling and Analysis Plan – Private Dredging USACE Galveston District (USACE, 2019) and submit a copy of those results to Ms. Lisa Finn (Lisa.M.Finn@usace.army.mil) and/or Ms. Emily Drastata (Emily.A.Drastata@usace.army.mil), as required for comment/approval.

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?

Enterprise Response

No Action Alternative

If use of mechanical silt blade dredging as an alternative to the use of hydraulic and mechanical dredging is not approved, maintenance dredging would be required more frequently, subsequently requiring additional DMPA volume which leads to a more rapid filling of already-limited DMPAs and associated capacities.

Proposed Alternative

The basic purpose under the proposed permit amendment is to continue providing needed access to mooring facilities and docks, which makes the proposed activity water dependent.

Enterprise has proposed the use of mechanical silt blade dredging as an alternative to the use of hydraulic and mechanical dredging which has been previously authorized, including a 5-year maintenance dredging authorization that expires December 31, 2025.

According to the SWG-USCAE website, "the U.S. Army Corps of Engineers Galveston District dredges approximately 30 to 40 million cubic yards of material from Texas channels to fulfill its mission of keeping waterways open for navigation and commerce (benefiting 28 ports handling 400 million tons of commerce annually)."

Sufficient capacity must be available to accommodate the proposed non-federal applicant without reducing the availability of the federal DMPAs for federal project purposes. Enterprise understands that capacity constraints exist at times, which is why the proposed use of mechanical silt blade dredging is proposed in an effort to minimize constraints on already taxed DMPAs.

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

Enterprise Response

Footprint is not changing on the existing, permitted facility. The basic purpose under the proposed permit amendment is to continue providing needed access to existing mooring facilities and docks, which makes the proposed activity

water dependent. The MP8 facility is built and operational based on permit authorizations (SWG-2014-00905) and subsequent amendments.

Enterprise has proposed the use of mechanical silt blade dredging as an alternative to the use of hydraulic and mechanical dredging.

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

Enterprise Response
Enterprise has proposed the use of mechanical silt blade dredging as an alternative to the use of hydraulic and mechanical dredging on a facility that has already been constructed per SWG-2014-00905 and subsequent amendments. Making the project smaller is not applicable to the proposed action.

D. What other sites were considered?

Enterprise Response
The MP8 facility is built and operational based on current permit authorizations (SWG-2014-00905) and amendments. No other sites were considered.

1. What geographical area was searched for alternative sites?

Enterprise Response
Not applicable since the proposed action involves an existing/permitted facility.

2. How did you determine whether other non-wetland sites are available for development in the area?

Enterprise Response
Not applicable since the proposed action involves an existing/permitted facility.

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?

Enterprise Response
Not applicable since the proposed action involves an existing/permitted facility.

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

Enterprise Response
The established MP8 facility is built and operational based on current permit authorizations (SWG-2014-00905) and amendments.

Under this permit amendment, Enterprise has proposed the use of mechanical silt blade dredging as an alternative to the use of hydraulic and mechanical dredging which has been previously authorized, which includes a 5-year maintenance dredging authorization that expires December 31, 2025. Not conducting silt blading operations will require maintenance dredging to be required more frequently, subsequently requiring additional DMPA volume which leads to a more rapid filling of already limited DMPAs and associated capacities.

II. Comparison of alternatives

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

Enterprise Response
The project is located within the previously established Barbour's Cut Ship Channel which connects to the Houston Ship Channel. The Barbour's Cut Ship Channel provides access to mooring facilities and docks. The MP8 facility is built and operational based on permit authorizations (SWG-2014-00905) and amendments.

Two (2) alternatives are being considered under the proposed permit amendment, (1) No Action Alternative and (2) Proposed Alternative.

No Action Alternative
Costs would be based on current mechanical and hydraulic dredge pricing from marine contractors, tipping fees for the placement of dredge material into DMPAs, and laboratory costs associated with each DMPAs testing requirements.

Action Alternative
Costs would be based on current mechanical silt blade dredge pricing from marine contractors. Since there would be no placement of dredge materials into DMPAs, there would be no tipping fees associated with silt blade dredging, as those materials would be re-distributed on the facility bottom in order to maintain permitted depths within the berthing areas and along the side slopes of the docking structure.

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

Enterprise Response
The MP8 facility is built and operational based on current permit authorizations (SWG-2014-00905) and amendments. There are a limited number of nearby

DMPAs and limited space to establish new DMPAs. Long distance transportation of dredge materials is not economically viable.

C. Are there technological limitations for the alternatives considered?

Enterprise Response
The MP8 facility is built and operational based on current permit authorizations (SWG-2014-00905) and amendments. There are no known technological limitations.

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

Enterprise Response
The MP8 facility is built and operational based on current permit authorizations (SWG-2014-00905) and amendments. Based on current knowledge or available DMPAs and technology, there are no other feasible alternatives.

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

Enterprise Response
The MP8 facility is built and operational based on current permit authorizations (SWG-2014-00905) and amendments.

Additionally, sufficient capacity must be available to accommodate the proposed non-federal applicant without reducing availability of the federal DMPA for federal project purposes. Enterprise understands that capacity constraints exist at times, which is why the proposed use of mechanical silt blade dredging is proposed in an effort to minimize constraints on already taxed DMPAs.

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

Enterprise Response
The MP8 facility is built and operational based on permit authorizations (SWG-2014-00905) and amendments.

With respect to the proposed silt blade dredging, Enterprise would employ best management practices to reduce turbidity, total suspended solids, and particulate matter in the water during silt blade contouring events.

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

Enterprise Response

Not applicable since the proposed action involves an existing/permitted facility.