



Public Notice

**U.S. Army Corps
Of Engineers**

Galveston District

Permit Application No: SWG-2013-00147

Date Issued: 23 May 2017

Comments

Due: 23 June 2017

U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT

PURPOSE OF PUBLIC NOTICE: To inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. The U.S. Army Corps of Engineers (Corps) is not the entity proposing or performing the proposed work, nor has the Corps taken a position, in favor or against the proposed work.

AUTHORITY: This application will be reviewed pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (MPRSA).

APPLICANT: Freeport LNG Development, L.P.
333 Clay Street, Suite 5050
Houston, Texas 77002
Telephone: 713-375-9886
POC: Ms. Erin Piper

AGENT: Lloyd Engineering, Inc.
6565 West Loop South, Suite 708
Houston, Texas 77401
Telephone: 832-426-4656
POC: Ms. Marisa Weber

LOCATION: The project site is located on the Freeport Harbor Ship Channel, near the City of Freeport, in Brazoria County, Texas. The Freeport Maintenance Offshore Dredge Material Disposal Site (ODMDS) is located approximately 3 miles offshore and about 1,000 feet southwest of the centerline of the Outer Bar Channel. . The project can be located on the U.S.G.S. quadrangle map entitled: FREEPORT, Texas.

LATITUDE & LONGITUDE (NAD 83):

Latitude: 28.982761 North;

Longitude: -95.309178 West

PROJECT DESCRIPTION: Freeport LNG Development (FLNG) have requested a modification to their existing Department of the Army permit to include maintenance dredging of the entire FLNG Basin (both Dock 1 and Dock 2). Dredging will be conducted via a hydraulic cutter head dredge and/or mechanical clamshell dredge to excavate the material that will be directly loaded to a dump scow barge. The barge will be transported to the Freeport Harbor Maintenance ODMDS where the material will be dumped. Each maintenance dredging cycle is expected to take 3 months to complete. Submittals to evaluate effects of dredging and disposal of dredge material will be conducted, as required by Section 103 of the MPRSA. FLNG has estimated that the initial maintenance dredge cycle will remove approximately 1,200,000 cubic yards. Subsequent maintenance dredge cycles will occur annually and are estimated to remove approximately 500,000 cubic yards.

FREEPORT MAINTENANCE ODMDS: The Freeport Maintenance ODMDS was designated by the Environmental Protection Agency (EPA) for maintenance dredging activities within the Freeport Harbor Channel. Previous environmental analyses for the Freeport Maintenance ODMDS were conducted by the EPA during the initial designation of the site in 1991, and by the Corps in the Final Environmental Impact Statement (EIS) for the Proposed Port Freeport Channel Widening Project in January 2008, and subsequently in the Final EIS for the Freeport Harbor Channel Improvement Project in September 2012. The Freeport Harbor Maintenance ODMDS is located approximately 3 miles offshore, and about 1,000 feet southwest of the centerline of the Outer Bar Channel. The site is rectangular in shape with corner coordinates located at:

28°54'00"N, 95°15'49"W; 28°53'28"N, 95°15' 16"W;
 28°52'00"N, 95°16'59"W; 28°52'32"N, 95°17'32"W.

Table 1 below describes the known dredge material discharges at Freeport Maintenance ODMDS.

Table 1. Freeport Maintenance ODMDS Discharge History

| Cubic Yard | Project Type | Dredge Locale | Start Date | End Date | Material Type |
|------------|---------------------|---|------------|------------|---------------|
| 2096850 | Federal Maintenance | Freeport Harbor, TX, Entrance & Jetty Channels | 9/12/2015 | 12/31/2015 | Slurry |
| 495000 | Federal Maintenance | Freeport Harbor, TX, Entrance & Jetty Channels | 1/1/2015 | 2/8/2015 | Slurry |
| 25928 | Federal Maintenance | Freeport Harbor, TX (entrance and jetty channels) | 1/2/2014 | 1/4/2014 | Slurry |
| 500000 | Federal Maintenance | Freeport Harbor, TX, Jetty Channels | 11/21/2014 | 12/27/2014 | Slurry |

| | | | | | |
|----------------|---------------------|---------------------|------------|------------|---------|
| 1682299 | Federal Maintenance | Freeport Harbor, TX | 9/4/2013 | 10/22/2013 | Slurry |
| 212891 | Federal Maintenance | Freeport Harbor, TX | 11/2/2012 | 11/13/2012 | Slurry |
| 1084534 | Federal Maintenance | Freeport Harbor, TX | 12/26/2011 | 1/17/2012 | Slurry |
| 1477371 | Federal Maintenance | Freeport Harbor, TX | 9/12/2012 | 10/9/2012 | Slurry |
| 1547600 | Federal Maintenance | Freeport Harbor, TX | 1/1/2011 | 2/5/2011 | Slurry |
| 429900 | Federal Maintenance | Freeport Harbor, TX | 12/22/2010 | 12/31/2010 | Slurry |
| 7500 | Federal Maintenance | Freeport Harbor, TX | 1/17/2010 | 1/18/2010 | Slurry |
| 2420755 | Federal Maintenance | Freeport Harbor, TX | 10/30/2009 | 11/25/2009 | Slurry |
| 1577096 | Federal Maintenance | Freeport Harbor, TX | 10/21/2008 | 12/3/2008 | Slurry |
| 1012300 | Federal Maintenance | Freeport Harbor, TX | 1/1/2007 | 2/20/2007 | Slurry |
| 1415421 | Federal Maintenance | Freeport Harbor, TX | 10/12/2007 | 12/4/2007 | Slurry |
| 1722891 | Federal Maintenance | Freeport Harbor, TX | 1/1/2006 | 2/20/2006 | Slurry |
| 1503700 | Federal Maintenance | Freeport Harbor, TX | 10/7/2006 | 12/31/2006 | Slurry |
| 188200 | Federal Maintenance | Freeport Harbor, TX | 12/27/2005 | 12/31/2005 | Slurry |
| 1908831 | Federal Maintenance | Freeport Harbor, TX | 9/4/2004 | 11/29/2004 | Slurry |
| 1726186 | Federal Maintenance | Freeport Harbor, TX | 8/11/2003 | 10/11/2003 | Slurry |
| 1996354 | Federal Maintenance | Freeport Harbor, TX | 5/1/2002 | 8/24/2002 | Slurry |
| 2479249 | Federal Maintenance | Freeport Harbor, TX | 6/1/2001 | 9/1/2001 | Slurry |
| 338800 | Federal Maintenance | Freeport Harbor, TX | 1/1/2000 | 1/10/2000 | Slurry |
| 1859847 | Federal Maintenance | Freeport Harbor, TX | 7/30/2000 | 11/28/2000 | Slurry |
| 1863488 | Federal Maintenance | Freeport Harbor, TX | 10/30/2000 | 12/31/2000 | Slurry |
| 1555615 | Federal Maintenance | Freeport Harbor, TX | 9/3/1999 | 12/31/1999 | Clumped |
| 2344436 | Federal Maintenance | Freeport Harbor, TX | 10/11/1998 | 11/26/1998 | Slurry |

| | | | | | |
|----------------|---------------------|---------------------|------------|------------|--------|
| 2489108 | Federal Maintenance | Freeport Harbor, TX | 1/2/1997 | 4/21/1997 | Slurry |
| 1053157 | Federal Maintenance | Freeport Harbor, TX | 11/11/1997 | 12/10/1997 | Slurry |
| 579500 | Federal Maintenance | Freeport Harbor, TX | 6/27/1996 | 8/5/1996 | Slurry |
| 2674026 | Federal Maintenance | Freeport Harbor, TX | 9/26/1995 | 12/31/1995 | Slurry |
| 2599267 | Federal Maintenance | Freeport Harbor, TX | 8/3/1994 | 12/20/1994 | Slurry |
| 1415742 | Federal Maintenance | Freeport Harbor, TX | 7/9/1993 | 9/4/1993 | Slurry |
| 2884532 | Federal Maintenance | Freeport Harbor, TX | 8/28/1992 | 11/24/1992 | Slurry |

AUTHORIZED DISPOSAL EFFECTS: Dredged material deposited at the Freeport Maintenance ODMDS disperse and erode quickly. There are no significant environmental resources delineated within or immediately outside of the designated ODMDS. Since this site is dispersive in nature, the primary concern of the use of the site is the potential short-term buildup of dredged material, such that a hazard to navigation is presented. Another concern is whether there is significant short-term transport of the dredged material beyond the ODMDSs boundaries; specifically, the benthic community can be impacted if significant rapid movement of material off the site occurs, resulting in burial of benthic populations outside the site.

CHARACTERISTICS AND COMPOSITION OF THE DREDGED MATERIAL: In May 2013, chemical analysis of water, sediment, and elutriate samples; suspended particulate phase (SPP) and solid phase (SP) bioassays; and bioaccumulation studies were conducted on maintenance material located in the Freeport Harbor – Inside Channel and Basins to determine its suitability for ocean placement. During this assessment, twelve channel sites, three Placement Area (PA) sites, and three Reference Area (REF) sites were sampled for water and sediment. Of those, the channel sites were composited into four channel samples, the PA sites were composited into one PA sample, and the REF sites were composited into one REF sample.

Based on the results of the analysis, none of the channel station water samples collected had exceedances of any acute Texas Water Quality Standards (TWQS) or EPA Water Quality Criteria (WQC) (Criteria Maximum Concentration [CMC]), except for the CMC for cyanide which occurred at all channel stations, REF stations, and PA stations. As stated in the contaminant assessment report, the analytical results reported are for total cyanide whereas the CMC and TWQS are for free cyanide as only free cyanide is considered to be a biologically meaningful expression of cyanide toxicity (Eisler, 1991). The relationship between total cyanide and free cyanide in natural waters varies with receiving water condition, types of cyanide compounds present, degree of exposure to daylight, and presence of other chemical compounds. Comparing total cyanide values to free cyanide benchmarks is a very conservative approach and even if all of the cyanide were present as free cyanide, the WQS would not be exceeded. Additionally, all values are qualified "J", meaning the values are estimated concentrations with high uncertainty. Given the low levels present, the well oxygenated and high electrolyte marine environment, and the lack of industrial sources, this finding was not considered significant.

Based on a review of the sediment analysis, the only trends in the sediment data were (1) the metals concentrations in the F-EC-13-PA1 sample are generally lower than at the other stations and (2) the REF station concentrations were neither higher nor lower than those of the channel stations. The trends noted above are consistent with the grain size data since F-EC-13-PA1 had the highest percent sand and gravel (37.1% sand and gravel) and the reference station was similar to the channel stations. The concentrations of all organics were below detection limits, except for total organic carbon (TOC), bis (2-ethylhexyl) phthalate, and diethyl phthalate. The concentration of bis (2-ethylhexyl) phthalate was similar at the REF and channel stations, while the concentrations of diethyl phthalate were highest in the REF station sediments. There are several different guidelines that are used to look for a cause for concern in sediment samples, one of which is the Effects Range Low (ERL) developed by a technique that demonstrates no cause and effect from the chemicals in the data set, and are used only to determine a possible "cause of concern." Results of the sediment analysis conducted indicated that no ERL was exceeded in any channel, PA, or REF sample.

Depths currently range from approximately 29 to 47 feet in the FLNG berthing area. Recent shoaling has occurred as a result of sequential 500-year flood events. Sediment analysis conducted in 2016, show that the material in the Quintana Island Terminal Berthing area contains primarily silts to very fine silts, with some clay.

While shoal material has been tested in the Freeport Harbor Inner Channel and Basin, new testing is required because shoal material from the dock footprint itself has never been tested for its suitability for ocean disposal. A Sampling Analyses Plan (SAP)/Quality Assurance Project Plan (QAPP) has been approved by the Corps and EPA to analyze the maintenance material accumulated within the Quintana Island Terminal Berth and determine its suitability for offshore placement. This analysis will consist of all three analytical tiers (Tier I, Tier II, and Tier III).

AVOIDANCE AND MINIMIZATION: FLNG has conducted an alternatives analysis, which is included in the enclosed FLNG Marine Basin Sedimentation Study, and concluded that the proposed offshore disposal avoids and minimizes impacts to water of the U.S. to the greatest extent practicable.

MITIGATION: The applicant has not proposed compensatory mitigation for the maintenance dredging.

CURRENT SITE CONDITIONS: The U.S. Army Corps of Engineers (USACE), Galveston District issued Permit No. SWG-2013-00147 under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act (Section 404/10) to Freeport LNG (FLNG) for the Liquefaction Project and Phase II Developments (Project) on 23 September 2014. The USACE issued an amendment to Permit No. SWG-2013-00147 on 9 September 2015 adding the Freeport New Work ODMDS as a placement area. Under the original permit and subsequent amendment, 1,188,000 cubic yards of new work material was dredged from the Phase II LNG berthing area for placement into the New Work ODMDS. The FLNG Berth encompasses the Phase II LNG berthing area (authorized under SWG-2013-00147) and the Phase I LNG berthing area (authorized under SWG-2003-02110). The authorized depth of the FLNG berth is 46.5 feet plus 2 feet over dredge.

NOTES: This public notice is being issued based on information furnished by the applicant. This project information has not been verified by the Corps. The applicant's plans are enclosed in 5 sheets. In addition, FLNG has provided their FLNG Marine Basin Sedimentation Study in 13 pages and their Environmental Analysis for Offshore Disposal Maintenance Dredged Material in 20 sheets.

A preliminary review of this application indicates that an EIS is not required. Since permit assessment is a continuing process, this preliminary determination of EIS requirement will be changed if data or information brought forth in the coordination process is of a significant nature.

OTHER AGENCY AUTHORIZATIONS:

Consistency with the State of Texas Coastal Management Plan is required. The applicant has stated that the proposed activity complies with Texas' approved Coastal Management Program goals and policies and will be conducted in a manner consistent with said program.

No water quality certification is required.

NATIONAL REGISTER OF HISTORIC PLACES: The Maintenance Dredge ODMDS has been fully surveyed and no historic properties were identified.

THREATENED AND ENDANGERED SPECIES: Preliminary indications are that no known threatened and/or endangered species or their critical habitat will be affected by the proposed work.

ESSENTIAL FISH HABITAT: This notice initiates the Essential Fish Habitat consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Our initial determination is that the proposed action would not have a substantial adverse impact on Essential Fish Habitat or federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

PUBLIC INTEREST REVIEW FACTORS: This application will be reviewed in accordance with 33 CFR 320-332, the Regulatory Programs of the Corps, and other pertinent laws, regulations and executive orders. The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal, will be considered: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and, in general, the needs and welfare of the people.

SOLICITATION OF COMMENTS: The Corps is soliciting comments from the public, Federal, State, and local agencies and officials, Indian tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Impact Assessment and/or an EIS pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

This public notice is being distributed to all known interested persons in order to assist in developing facts upon which a decision by the Corps may be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition.

PUBLIC HEARING: The purpose of a public hearing is to solicit additional information to assist in the evaluation of the proposed project. Prior to the close of the comment period, any person may make a written request for a public hearing, setting forth the particular reasons for the request. The District Engineer will determine if the reasons identified for holding a public hearing are sufficient to warrant that a public hearing be held. If a public hearing is warranted, all known interested persons will be notified of the time, date, and location.

CLOSE OF COMMENT PERIOD: All comments pertaining to this public notice must reach this office on or before **23 June 2017**. Extensions of the comment period may be granted for valid reasons provided a written request is received by the limiting date. **If no comments are received by that date, it will be considered that there are no objections.** Comments and requests for additional information should reference our file number, **SWG-2013-00147**, and should be submitted to:

Policy Analysis Branch
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