FINDING OF NO SIGNIFICANT IMPACT

Use of Outer Continental Shelf Sand from South Pelto Blocks 12 and 13 for the CPRA East Timbalier Barrier Island Restoration (TE-118) Project Lafourche Parish, Louisiana

Introduction

Pursuant to the National Environmental Policy Act (NEPA) and the Council on Environmental Quality's (CEQ) regulations implementing NEPA (40 CFR parts 1500-1508), the Louisiana Coastal Protection and Restoration Authority (CPRA), in coordination with the Bureau of Ocean Energy Management (BOEM), prepared an environmental assessment (EA) (Attachment 1) to determine whether authorizing the use of Outer Continental Shelf (OCS) sand from Ship Shoal would have a significant effect on the human environment and whether an environmental impact statement should be prepared. Pursuant to the U.S. Department of the Interior's (DOI) regulations implementing NEPA (43 CFR part 46), BOEM has independently reviewed the EA and has determined that the potential impacts of the proposed action have been adequately addressed.

This Project is one of several that the State of Louisiana has proposed to address the impacts of the *Deepwater Horizon* oil spill on the natural resources in the area through the Gulf Environmental Benefit Fund, which is administered through the National Fish and Wildlife Foundation. The Gulf Environmental Benefit Fund was established by the National Fish and Wildlife Foundation in accordance with plea agreements between BP Exploration & Production, Inc., Transocean Deepwater, Inc. (January 3, 2013), and the United States of America following the 2010 *Deepwater Horizon* explosion, oil spill, and response. Approximately $1.2 billion of the funds directed to the National Fish and Wildlife Fund is dedicated to targeting Louisiana impacts by using the funds solely for barrier island restoration or river diversion projects on the Mississippi and/or Atchafalaya Rivers for the purpose of creating, preserving, and restoring coastal habitat (National Fish and Wildlife Foundation, 2017).

The Project includes restoring the geomorphic and ecological form and function of the West Belle Headland through beach and dune fill placement utilizing offshore sand sources from Ship Shoal Block 88 and restoring marsh habitat using nearshore mixed sediment borrow areas. The East Timbalier Barrier Island Restoration Project (TE-118) was formulated in compliance with NEPA, in coordination with the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS). As a consequence of all of the previous planning and evaluation efforts, an array of alternatives was considered for this Project, including the No Action or Future Without Project Alternative and the selected Preferred Alternative. Due to a change in project conditions and budgetary constraints, only the West Belle Headland portion of the East Timbalier Barrier Island Restoration project is being carried forward at this time. It will be constructed in conjunction with the Terrebonne Basin Barrier Island Restoration Project (TE-143).

The U.S. Department of the Army, Corp of Engineers (COE), as part of the Section 10/404 Permit process, prepared a joint public notice (Attachment 2) with BOEM. Additionally, COE prepared an independent EA to determine the least damaging, most practicable project alternative. The scope of COE's evaluation of potential environmental impacts included the OCS borrow area and both sand/sediment conveyance corridors. BOEM and COE have been working collaboratively to ensure effective implementation of the required NEPA process.

Proposed Action

BOEM's proposed action is the issuance of a negotiated noncompetitive agreement (NNA) to authorize the use of 4 million cubic yards of sand from the Ship Shoal sand body, which is located in Federal waters on the OCS approximately 8.2 nautical miles (nmi) (9.4 miles [mi]; 15.2 kilometers [km]) southwest of West Belle Headland. The three borrow areas located in the Gulf of Mexico, including the OCS sand resource, are located approximately 8.2 nmi (9.4 mi; 15.2 km) to the southwest

of West Belle Headland on the OCS in South Pelto Blocks 12 and 13 and a marsh-fill source located approximately 2.3 nmi (2.6 mi; 4.3 km) to the south of West Belle Headland (in State-owned waters). The borrow areas are identified as the South Pelto Borrow Areas (2 areas) and the Ship Shoal Borrow Area. The South Pelto Borrow Areas are located in South Pelto Lease Block 13 and are based on prior geophysical and geotechnical investigations in South Pelto Lease Blocks 13 and 14. The Ship Shoal Borrow Area is located within South Pelto Lease Blocks 12 and 13 on the east-central portion of the Ship Shoal sand body on the OCS. Additional borrow areas are proposed within Louisiana State waters and are not part of BOEM's agreement/lease action. The project also includes a temporary dredge pipeline conveyance corridor connecting the marsh borrow area/pump-out area to the restoration area.

For the beach and dune restoration of West Belle Headland, fill material will be placed along approximately 10,000 feet (ft) (3,048 meters [m]) of shoreline (Attachments 3 and 4). The dune will be constructed to 7.5 ft (2.3 m) North American Vertical Datum of 1988 (NAVD88) with a width of 290 ft (88 m) and typical width of 100 ft (30 m) at the crest with a slope of 1:25 from the berm crest extending seaward to the intersection with the existing grade. The beach fill will be approximately 550-800 ft (168-244 m) wide along the length of the shoreline. A sand fence will be installed to promote trapping of windblown sand to form dunes. For marsh restoration, the Project will use the West Belle Marsh Borrow Area in State-owned waters containing muddy sand (Attachment 4). The marsh-fill will extend approximately 10,000 linear feet (3,048 m) westward from the existing TE-52 Project. The marsh-fill containment dike will be constructed from sediments extracted *in situ*. The marsh platform target elevation is 3.0 ft (0.9 m) NAVD88 with a minimum width of 1,145 ft (349 m). The marsh restoration area will be planted with salt marsh vegetation. A temporary 500-ft (152-m) wide conveyance corridor will be required from the marsh borrow area/pump-out (Attachment 4). The beach and dune features for the West Belle Headland Renourishment Area include the dune, which is approximately 8,400 linear feet (2,560 m)in length, constructed at a target elevation of 7.5 ft (2.3 m) NAVD88 and a typical width of 100 ft (30 m) at the crest. The target elevation of the beach will be 5.0 ft (1.5 m) NAVD88 from the beach berm crest extending seaward to the intersection with the existing grade, and a typical width of 292 ft (89 m). The marsh feature for the West Belle Headland Renourishment Area is approximately 7,200 linear feet (2,195 m) in length, is north of the beach and dune, and involves placement of approximately 0.4 million cubic yards (mcy) of mixed sediment to create intertidal marsh habitat. The marsh platform target elevation is 3.0 ft (0.9 m) NAVD88 with an average width of approximately 1,500 ft (457 m). In addition, a Feeder Beach will be constructed, using sand from Ship Shoal/South Pelto Borrow Areas, along West Belle Headland extending approximately 4,000 linear feet (1,219 m) from the west jetty to provide sediment that will nourish the remaining shoreline. The 68-acre (28 hectare) Feeder Beach will be constructed to an elevation of 1.0 ft (0.3 m) NAVD88, with a length of approximately 4,000 linear feet (1,219 m), a width ranging from 420 to 920 ft (128 to 280 m), and a seaward slope of 1V:25H (Attachment 3).

South Pelto Block Areas 12 and 13 are located on the sand body known as Ship Shoal and are selected because it contains high-quality sand with similar textural character to that of the native sand on West Belle Headland and adjacent islands, it is free of oil and gas infrastructure, and because of its proximity to the Project site. Ship Shoal has been studied extensively over the past three decades to define stratigraphy and sediment character, document and monitor environmental conditions, employ numerical models to predict effects associated with sand excavation, and identify any potential cultural resources and infrastructure that may be present. The total surface area of the Ship Shoal sand body is approximately 101,100 acres (40,914 hectares) of which the Ship Shoal and South Pelto Borrow Areas comprise 801 acres (324 hectares). The sand units at the South Pelto and Ship Shoal Borrow Areas are ~14-18 ft (4-5 m) thick, respectively, and are composed of ~95 percent very fine sand (with ~5% mud). The Ship Shoal Borrow Area design cut depths range from -35 ft (-10.7 m) NAVD88 to -40 ft (-12.2 m) NAVD88 with a 3.0-ft (0.9-m) limit of disturbance ranging from -38 ft (-11.6 m) NAVD88 to -43 ft (-13.1 m) NAVD88 (Attachment 1). The design excavation volume at the Ship Shoal Borrow Area is estimated to be approximately 6.5 mcy. The South Pelto Borrow Area design cut depths range from -40 ft (-12.2 m) NAVD88 to -44 ft (-13.4 m) NAVD88 with a 3.0-ft (0.9-m)

limit of disturbance ranging from -43 ft (-13.1 m) NAVD88 to -47 ft (14.3 m) NAVD88 (Attachment 1). The design excavation volume at South Pelto Borrow Area is estimated to be approximately 4.7 mcy.

Hopper and/or cutterhead dredges could be used depending on the contractor and dredge availability. Excavated sand would be discharged into the hopper hulls or scow barges for transport to the headland. Hopper dredges would suspend the sand within the hoppers and directly pump out the sand to the headland using a booster pump and sediment pipeline. Alternatively, a conventional cutterhead dredge would excavate the sand mechanically using a rotating cutter, then use a large suction pump to pump sand to the surface, and then transfer sand through a spider-barge distribution system into multiple scow barges. These scow barges would be towed to a pump-out area where a hydraulic dredge connected to a booster pump and sediment pipeline would offload the scows and pump the sand to the headland.

The purpose of BOEM's proposed action is to respond to a request for the use of OCS sand under the authority granted to DOI by the Outer Continental Shelf Lands Act (OCSLA). The legal authority for the issuance of negotiated noncompetitive leases for OCS sand extraction and transport across the OCS is provided by the OCSLA (43 U.S.C. § 1337(k)(2)).

Alternatives to the Proposed Action

The only alternative to BOEM's proposed action is no action. However, the potential impacts resulting from BOEM's no action actually depend on the course of action subsequently pursued by the CPRA, which could include identification of alternative offshore or upland sand sources. In the CPRA's case, the No Action Alternative would result in continued barrier island, estuarine, and wetland habitat deterioration and coastal erosion, and it would increase the likelihood and frequency of property damage from large storms.

In past environmental analyses for this restoration project, a number of alternatives related to sand sources has been considered. The alternatives have narrowed over time due to lack of sufficient volume, inferior sediment quality relative to the native beach sand, the potential for excavations closer to shore to alter wave climate and exacerbate shoreline erosion, and/or the presence of existing pipelines, oil and gas wells, and associated industry structures.

Environmental Effects

The East Timbalier Barrier Island Restoration Project (TE-118) is one of several projects that the State of Louisiana has proposed to address the impacts of the *Deepwater Horizon* oil spill on the natural resources in the area through the Gulf Environmental Benefit Fund, which is administered through the National Fish and Wildlife Foundation. On April 20, 2010, an explosion occurred on the *Deepwater Horizon* drilling platform in Mississippi Canyon Block 252 (MC252), releasing an estimated 4.9 million barrels of oil. Approximately 820,000 barrels were directly recovered at the well site and approximately 4.1 million barrels of oil were released into the Gulf of Mexico over a period of 87 days (USDOI, BOEM, 2012). This adversely affected large coastal areas of Louisiana (Lubchenco et al., 2010), including the TE-118 East Timbalier Restoration Project Area.

As noted in the EA, the COE issued a Section 10/404 Permit for the Project on November 7, 2018 (Attachment 3). Prior to permit issuance, the Louisiana Department of Environmental Quality (LADEQ) issued a water quality certification on March 11, 2013 (Attachment 4). The Louisiana Department of Natural Resources (LADNR) issued a coastal use permit on August 4, 2017 (Attachment 5) and a Consistency Determination for activities on the OCS on October 25, 2013 (Attachment 6). On April 24, 2017, the COE, LADEQ, and BOEM prepared and published a joint 30-day public notice that included the OCS portion of the project. The COE also completed an Environmental Assessment/Decision Document (Attachment 7) that evaluated the entire project to include the proposed use of OCS sand resources. The LADNR's Coastal Use Permit/Consistency Determination and COE's Section 10/404 Permit and EA concluded that the proposed project did not result in any significant long-term environmental impacts and that the project is in the public's interest.

Based on the effects analysis presented in the joint EA by the CPRA and BOEM (Attachment 1), no significant impacts were identified. The EA identifies all mitigation and monitoring that is necessary

to avoid, minimize, and/or reduce and track any foreseeable adverse impacts that may result from all phases of construction. A subset of mitigation, monitoring, and reporting requirements, specific to activities under BOEM's jurisdiction, will be incorporated into the NNA (between BOEM and the CPRA for the use of OCS sediment resources) to avoid, minimize, and/or reduce and track any foreseeable adverse impacts.

Significance Review

Pursuant to 40 CFR § 1508.27, BOEM evaluated the significance of potential environmental effects considering both CEQ context (such as society as a whole, human, and national; the affected region; the affected interests; and the locality) and intensity factors. The potential significance of environmental effects has been analyzed in both spatial and temporal contexts. The potential effects are generally considered reversible because they will be minor to moderate, localized, and short-lived. No long-term significant or cumulative adverse effects were identified. The primary factors noted below were considered in the EA.

1. Impacts that may be both beneficial and adverse

The project area is part of Louisiana's critically important coastal zone, a diverse complex of ecosystems that include highly productive wetlands and fresh to saline estuarine waters and water bottoms that have high value as fish and wildlife habitat (i.e., essential fish habitat, migratory bird habitat, etc.) as well as high commercial and recreational fishery value (i.e., finfish, crustaceans, shellfish, etc.). The barrier islands protect these interior environments from direct assault by tropical and extratropical storms and function to maintain the estuarine conditions that make them so productive. In addition, the barrier islands protect a basin fringed by public and private infrastructure associated with numerous communities that provide essential services to the offshore oil and gas industry and which is also filled with private infrastructure associated with petroleum extraction and distribution. Protection and restoration of these barrier islands will prevent further degradation of these nationally important environmental and economic assets.

The Project will provide additional beach, dune, and marsh habitat for marine and estuarine fisheries resources and their forage species, as well as for a wide variety of avian communities including shorebirds, wading birds, colonial nesting birds, and migratory songbirds. A shorebird protection and bird abatement plan has been developed to protect avian resources during construction. Benthic resources on the Borrow Areas and at West Belle Headland will be disturbed by both excavation and fill placement during construction. These disturbances are unavoidable and the habitats recover rapidly. The cumulative impact of Project implementation will create nearly 819 acres (331 hectares) of dune, supratidal, and intertidal marsh habitat. A positive cumulative impact will also accrue to the ecological benefits, including pelagic and benthic estuarine productivity, wildlife habitat, essential fish habitat, migratory bird habitat, and habitat for threatened and endangered species into the future. The project will also provide sand that will be naturally distributed by wave-generated currents to maintain and enhance downdrift barrier island habitats outside of the project footprint.

The potential adverse effects to the physical environment, biological resources, cultural resources, and socioeconomic resources have been considered. Adverse effects to benthic habitat and communities in the borrow area are expected to be temporary and reversible. Short-term adverse effects on fish habitat and fishes are expected within the dredged area due to the disturbance of benthic habitat and changes in shoal topography, and in the fill placement area due to the burial of existing benthic habitat. The potential effects to sea turtles, migratory birds, marine mammals, and cultural resources in the vicinity of operations have been reduced through tested mitigation including, but not limited to, surveys for and avoidance of nesting birds, monitoring, and cultural resource buffers.

Presently, it is believed that hydraulic cutterhead dredges are unlikely to kill or injure sea turtles because it is believed that the cutterhead encounters a smaller area of seafloor per unit time, allowing more time for turtles to escape (USDOC, NMFS, 2005; Hawk, official communication, 2012). Hydraulic cutterhead pipeline dredges present discountable risks as they have not been implicated in turtle

takes, presumably because the slow-moving cutterhead is readily discerned and easily avoided by these species. Additionally, in numerous previous opinions issued by NMFS to the COE and BOEM since 1991 in both the South Atlantic and Gulf of Mexico COE districts, hydraulic cutterhead pipeline dredge use has been determined to be unlikely to adversely affect any listed species under NMFS's purview (USDOC, NMFS, 2005). If the hopper dredge method is used, sea turtle relocation trawling, paint test inspection, and all appropriate mitigation measures will be employed as specified in the Biological Opinion, Consultation Number SER-2003-1247 (USDOC, NMFS, 2005) and the stipulations of the Section 7(a)(2) and 7(d) determination.

The effects to sea turtles, marine mammals, nesting and courting shorebirds, and water quality will be monitored. No impacts to hard bottom benthic communities will occur. Temporary displacement of birds near the shoal site or beach shoreline/beach could occur. Birds may be attracted to feeding near the dredge, at the borrow area, or near discharge pipelines on the beach. Impacts would be short-term, localized, and temporary, and they should have no lasting effects on bird populations in the area. Temporary reduction of water quality is expected due to turbidity during dredging and placement operations. Small, localized, temporary increases in concentrations of air pollutant emissions are expected, but the short-term impact by emissions from the dredge or the tugs would not affect the overall air quality of the area. A temporary increase in noise level during construction in the vicinity of the dredging would occur. For safety reasons, navigational and recreational resources located in the immediate vicinity of the dredging operation would temporarily be unavailable for public use. No archaeological/cultural resources will be affected. A dredge with global positioning system (GPS) equipment will be used to ensure that the dredge is operating in the authorized location. An unexpected finds clause will be implemented in case any potentially significant, unrecorded archaeological/cultural resources are discovered during operations.

2. *Degree to which the proposed action affects public health or safety*

The proposed activities are not expected to significantly affect public health. Construction noise will temporarily increase ambient noise levels, and equipment emissions would decrease air quality in the immediate vicinity of placement activities. The public is typically prevented from entering the segment of beach under construction; therefore, recreational activities will not be occurring in close proximity to operations. During dredging operations, watercraft access will be restricted in the dredging area in the interest of public safety. These restrictions would be of short duration and are expected to be minor to boat operators. Public access during dredging and placement and the use of the area immediately surrounding the borrow area and in the vicinity of the shore restoration area would be restricted due to public safety. The COE's Section 10/404 Permit also requires the CPRA's contractors to coordinate and develop a safety plan with the U.S. Coast Guard.

3. *Unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas*

No prime or unique farmland, designated wild and scenic reaches, or wetlands would be impacted by implementation of this project. Also, there will be no significant impacts to critical habitat or essential fish habitat. The CPRA's dredge contractor and the pipeline corridors will be monitored for effects during dredging operations, pump-out, placement, and beach shaping operations.

4. *Degree to which the effects on the quality of the human environment are likely to be highly controversial*

No controversial effects are expected. Effects from beach nourishment projects, including dredging on the OCS, are well studied. The effects analyses in the EA have relied on the best available scientific information, including information collected by BOEM that is specific to this OCS borrow area, from past contracted dredging and permitted dredging activities in and adjacent to the project area, and from research conducted by the CPRA in support of barrier island restoration projects. Negative effects of dredging and barrier shoreline restoration activities on shoreline change, benthic

communities, nesting and swimming sea turtles, and shorebirds are expected to be minimal, localized, and short-term.

5. Degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks

Coastal/shoreline restoration projects are a common solution to coastal erosion and land loss problems along the Louisiana coast. Federally authorized and permitted beach and barrier island restoration and emergency shoreline sand nourishment actions have been ongoing since the mid-1990's and have increased since Hurricane Katrina In 2005. No significant adverse effects have been documented during or as a result of past operations. This Project was proposed to address the impacts of the *Deepwater Horizon* oil spill on the natural resources in the area through the Gulf Environmental Benefit Fund, which is administered through the National Fish and Wildlife Foundation. Mitigation and monitoring efforts are similar to that undertaken for past projects and have been demonstrated to be effective. The effects of the proposed action are not expected to be highly uncertain, and the proposed activities do not involve any unique or unknown risks.

6. Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

No precedent for future action or decision in principle for future consideration is being made in BOEM's decision to authorize the use of OCS sand from Ship Shoal. BOEM considers each use of a borrow area on the OCS as a new Federal action. BOEM's authorization of the use of the borrow area does not dictate the outcome of future leasing decisions. Future actions will also be subject to the requirements of NEPA and other applicable environmental laws.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts

Significance may exist if it is reasonable to anticipate cumulatively significant impacts that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. The EA identifies those actions and the potential impacts related to underlying activities. The EA and previous NEPA/regulatory documents conclude that the activities related to the proposed action are not reasonably anticipated to incrementally add to the effects of other activities to the extent of producing significant effects. Based on research and numerical modeling conducted by BOEM in anticipation of dredging activities at Ship Shoal, the seafloor is expected to equilibrate and sediment will accumulate in the Ship Shoal borrow location. The proposed project provides an incremental but localized effect on the reduction of offshore sand resources. Although there will be a short-term and local decline in benthic habitat and populations, both are expected to recover within a few years. No significant cumulative impacts to benthic habitat are expected from the use of the borrow site.

8. Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources

The proposed action will not affect any significant known scientific, cultural, or historic resources. Results of both terrestrial and open-water cultural resource surveys determined the absence of significant scientific, cultural, or historic resources within the area of potential effect. Section 106 coordination with the State Historic Preservation Officer and the Tribes of Louisiana has been completed and no additional cultural resource investigations are warranted. All of these activities have been completed in accordance with the National Historic Preservation Act, as amended; the Archeological and Historic Preservation Act, as amended; and Executive Order 11593. The Project is in full compliance with the National Historic Preservation Act, as well as with the Archaeological and Historic Preservation Act and Executive Order 11593.

9. *Degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973*

This Project was fully coordinated under the Endangered Species Act (ESA) and is in full compliance with the Act. The COE has consulted with FWS and NMFS. The CPRA prepared an EA, which was submitted to BOEM and the COE. BOEM participated in the preparation and publication of a Joint Public Notice with LADEQ, LADNR, and COE. The Public Notice was published on April 24, 2017 (Attachment 2). The FWS commented on the Public Notice in a letter dated March 18, 2013 (Attachment 9). The FWS concurred with COE that the proposed project was not likely to adversely affect the West Indian manatee and not likely to jeopardize the continued existence of the piping plover and not adversely modify its designated critical habitat, given the estimated piping plover take. Additionally, COE provided that appropriate mitigations (as noted in FWS's Biological Opinion) would be incorporated as conditions in COE's Section 10/404 Permit (Attachment 3). Additionally, the CPRA and FWS prepared and will implement a migratory bird abatement plan for shorebirds. A copy of that plan is attached to COE's permit (Attachment 3).

The Protected Resources Division coordinator and NMFS's essential fish habitat coordinator, in email dated June 30, 2017, and a letter dated May 23, 2017 (Attachment 10), did not have any detailed comments and concerns. Additionally, the existing September 2005 NMFS Biological Opinion issued to BOEM, titled "Hopper and Hydraulic Cutterhead Dredging Associated with Sand Mining for Coastal Restoration Projects Along the Coast of Louisiana Using Sand from Ship Shoal in the Gulf of Mexico Central Planning Area, South Pelto Blocks 12, 13, and 14 and Ship Shoal Block 88" (Consultation No. F/SERL2003/01247), covers this current project and adequately addressed the issues associated with threatened and endangered species. The Biological Opinion noted that hydraulic cutterhead pipeline dredges have never been implicated in turtle takes, presumably because the slow-moving cutterhead is readily discerned and easily avoided by these species. Additionally, in numerous previous opinions issued by NMFS to COE since 1991 in both the South Atlantic and Gulf of Mexico COE districts, hydraulic cutterhead pipeline dredge use has been determined to be unlikely to adversely affect any listed species under NMFS's purview; therefore, hydraulic cutterhead dredges will not be considered further in this opinion.

The NMFS's Southeast Regional Protected Resources Division authorized an annual incidental take level from hopper dredging for all projects using Ship Shoal sand covered under the 2005 Biological Opinion. The take allowances are not specific to the East Timbalier Barrier Island Restoration Project and are spread across multiple planned projects that intend to use hopper dredges at Ship Shoal. During the Caminada Headlands Restoration Project (BA-45 and BA-143), the annual incidental take level as authorized under this Biological Opinion for hopper dredging was exceeded during relocation trawling efforts. On June 5, 2014, NMFS concurred via email with BOEM's determination that operations would not violate Section 7(a)(2) and 7(d). The NMFS formally recognized the letter as a re-initiation of consultation; therefore, BOEM will continue to operate under the existing Biological Opinion while the re-initiation of the consultation proceeds. The CPRA has incorporated the obligations and recommendations identified in the 2005 Biological Opinion, the 2013 NMFS letter, and the guidelines established in the Section 7(a)(2) and 7(d) determination to minimize the impacts on listed species from dredging within the borrow areas.

10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment*

The COE's Section 10/404 Permit and LADNR's Coastal Use Permit require that the CPRA comply with all applicable Federal, State, and local laws and requirements. The COE and BOEM have completed required ESA and Marine Mammal Protection Act coordination with NMFS and FWS. A Coastal Use Permit and Consistency Determination from the LADNR and a Section 401, Clean Water Act Water Quality Certification from the LADEQ has been issued for the proposed action. Through COE's Section 10/404 Permit, monitoring and mitigation efforts with regard to migratory birds have been coordinated with FWS and the LADWF; an approved migratory bird abatement plan will be

implemented. The project will be in compliance with these Acts. Monitoring and mitigation efforts with regard to migratory birds are being coordinated with FWS and the LADWF; a migratory bird abatement plan will be implemented as conditioned in COE's Section10/404 Permit (Attachment 3). The proposed action is in compliance with the Marine Mammal Protection Act. Through COE's Section 10/404 Permit, the special conditions in the FWS's document titled "Standard Manatee Conditions for In-Water Activities" will be implemented to help avoid and/or minimize project related adverse effects to the West Indian manatee. Marine mammals are not likely to be adversely affected by the Project, and incorporation of safeguards to protect threatened and endangered species during Project construction would also protect marine mammals in the area. A water quality certification has been issued by the LADNR, and water quality will be monitored to ensure State water quality standards are not violated.

Consultations and Public Involvement

The COE, serving as the lead Federal agency, posted a public notice on April 24, 2017. BOEM was listed in the point-of-contact information for the public notice. Both COE, serving as the lead Federal agency, and BOEM, serving as the lead agency on the OCS portion of the project, have coordinated with FWS, NMFS, the U.S. Environmental Protection Agency, the Natural Resource Conservation Service, the Louisiana State Historic Preservation Officer, and the Tribes of Louisiana in support of this leasing decision. Pertinent correspondence with Federal and State agencies is attached (Attachments 1-10). The COE permit was reviewed by FWS and NMFS prior to issuance, and all of the appropriate mitigations have been included as conditions within the permit. Additionally, to avoid, minimize, and/or mitigate any foreseeable OCS adverse impacts, BOEM will incorporate appropriate terms and conditions (enforceable by BOEM) into the NNA.

After signature of this Finding of No Significant Impact (FONSI), a Notice of Availability of the FONSI and EA will be prepared and published by BOEM in the *Federal Register* or by other appropriate means. The EA and FONSI will be posted on BOEM's website at http://www.boem.gov/Non-Energy-Minerals/Marine-Mineral-Projects.aspx.

Conclusion

BOEM has considered the consequences of issuing an NNA to authorize the use of OCS sand from Ship Shoal. BOEM jointly prepared and independently reviewed the attached EA (Attachment 1) and finds that it complies with the relevant provisions of CEQ and DOI's regulations implementing NEPA and other Marine Minerals Program requirements. Based on the NEPA and consultation process coordinated cooperatively by COE, the CPRA, and BOEM, appropriate terms and conditions enforceable by BOEM will be incorporated into the NNA to avoid, minimize, and/or mitigate any foreseeable adverse impacts. The COE's Section 10/404 Permit requirements include the U.S. Coast Guard's requirements that serve as additional safeguards to reduce risk and to minimize and mitigate foreseeable and unforeseen impacts.

Based on the evaluation of potential impacts and mitigating measures discussed in the EA (refer to Appendix A of the FONSI), BOEM finds that entering into an NNA, with the implementation of the mitigating measures, does not constitute a major Federal action significantly affecting the quality of the human environment, in the sense of NEPA Section 102(2)(C), and will not require preparation of an environmental impact statement.

Attachments

1. Environmental Assessment for East Timbalier Barrier Island Restoration Project (TE-118)
2. Joint Public Notice
3. U.S. Department of the Army, Corps of Engineers, Section 10/404 Permit
4. Louisiana Department of Environmental Quality, Section 401 Water Quality Certification

5. Louisiana Department of Natural Resources, Coastal Use Permit/Consistency Determination (P20170043)
6. Louisiana Department of Natural Resources, Consistency Determination (C20170043)
7. U.S. Department of the Army, Corps of Engineers, Environment Assessment/Decision Document
8. Louisiana State Historic Preservation Office, Concurrence Letters
9. U.S. Department of the Interior, Fish and Wildlife Service, Endangered Species Act Consultation Letter
10. U.S. Department of Commerce, National Marine Fisheries Service, Endangered Species Act Comments/Consultation

FONSI

Appendix A of the FONSI – Mitigation, Monitoring, and Reporting Requirements

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6/03/2019
Date

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Appendix A
Mitigation, Monitoring, and Reporting Requirements

The following mitigation measures, monitoring requirements, and reporting requirements are proposed by the Bureau of Ocean Energy Management (BOEM) to avoid, minimize, reduce, or eliminate environmental impacts associated with the proposed action (herein referred to as the "Project"). Mitigation measures, monitoring requirements, and reporting requirements in the form of terms and conditions are added to the lease (negotiated agreement between BOEM and the Louisiana Coastal Protection and Restoration Authority (CPRA) and are considered enforceable as part of the lease.

Plans and Performance Requirements

The CPRA will provide BOEM with a copy of the Project's "Construction Solicitation and Specifications Plan" (herein referred to as the "Plan") prior to solicitation and construction. No activity or operation authorized by the lease at the borrow area shall be carried out until BOEM has had an opportunity to review the Plan, thus ensuring that each activity or operation is conducted in a manner that is in compliance with the provisions and requirements of the lease. BOEM recommends that the CPRA include the lease as a reference document in the advertised Plan. The CPRA will ensure that all operations at the borrow area are conducted in accordance with the final approved Plan and all terms and conditions in this lease, as well as all applicable regulations, orders, guidelines, and directives specified or referenced herein.

The dredging method for removing sand from the borrow area will be consistent with those methods identified in the Project proposal analyzed in supporting National Environmental Policy Act (NEPA) documents, authorizing documents, and all associated State and Federal permits. The CPRA will allow BOEM to review and comment on modifications to the Plan that may affect the project area, including the use of submerged or floated pipelines to directly convey sediment from the borrow area to the placement site. Said comments shall be delivered in a timely fashion in order to not unnecessarily delay the CPRA's schedule and construction contract.

If dredging and/or conveyance methods are not wholly consistent with those evaluated in relevant NEPA documents and environmental and cultural resource consultations, and authorized by the U.S. Department of the Army, Corps of Engineers' (COE's) Section 10/404 Permit and the Louisiana Department of Natural Resources' (LADNR's) Coastal Use Permit, additional environmental review may be necessary. If the additional NEPA, consultations, or permit modifications would affect or otherwise supplement the provisions of the lease, an amendment may be required.

Prior to the commencement of construction, the CPRA shall provide a summary of the construction schedule. The CPRA, at the reasonable request of BOEM or the Bureau of Safety and Environmental Enforcement (BSEE), shall allow access, to the site of any operation subject to safety regulations, to any authorized Federal inspector and shall provide BOEM or BSEE any documents and records that are pertinent to occupational or public health, safety, or environmental protection as may be requested.

Environmental Responsibilities and Environmental Compliance

BOEM is the lead Federal agency for the Outer Continental Shelf (OCS) portion of the Project and the COE is the lead for the coastal and terrestrial portions of the Project. Both Federal agencies must ensure that the Project complies with applicable environmental laws, including, but not limited to, the Endangered Species Act, Magnuson-Stevens Fishery Management and Conservation Act, Migratory Bird Treaty Act, National Historic Preservation Act, and Coastal Zone Management Act. The CPRA will implement recommended conservation measures and Terms and Conditions as specified in COE Permit No. MVN-2015-0895 and LADNR Permit No. P P20170043, including implementation of all applicable monitoring and conditions, such as water quality monitoring, marine turtle conditions, shorebird monitoring, marine mammal special conditions, nearshore biological monitoring, the sediment quality control/quality assurance plan, and the physical monitoring plan. Additionally, the CPRA will instruct its contractor(s) to implement the mitigation terms, conditions, and measures

required by the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), LADNR, COE, and BOEM pursuant to applicable Federal and State laws and regulations. The required mitigation terms, conditions, and measures are reflected in the Biological Opinions and Conservation Recommendations. Construction shall not commence until the preconstruction requirements have been completed. Copies of all relevant correspondence, monitoring, and reporting shall be provided to BOEM within 14 days of issuance at dredgeinfo@boem.gov (including, but not limited to, observer and dredging reports).

Dredge Positioning

During all phases of the Project, the CPRA will ensure that the dredge and any bottom-disturbing equipment is outfitted with an onboard global positioning system (GPS) capable of maintaining and recording location within an accuracy range of no more than plus or minus 3 meters (m) (9.8 feet [ft]). The GPS must be installed as close to the cutterhead or draghead as practicable. During dredging operations, the CPRA will immediately notify BOEM at dredgeinfo@boem.gov if dredging occurs outside of the approved borrow area.

Anchoring, spudding, or other bottom-disturbing activities are not authorized outside of the approved borrow area on the OCS.

The CPRA will provide BOEM all dredging quality management (DQM) or equivalent data (positioning and production data) acquired during the Project using procedures jointly developed by the COE's National Dredging Quality Management Data Program Support Center and BOEM. If the DQM procedure/support is not available to the CPRA, comparable data (in a format approved by BOEM prior to mobilization of dredging equipment to the OCS) will be submitted to BOEM at dredgeinfo@boem.gov on a biweekly basis. These biweekly dredge reports shall also include a summary of dredge excavator track lines, outlining any deviations from the original Plan. A color-coded plot of the excavator location, showing any horizontal or vertical dredge violations, will be submitted. This map will be provided in Adobe PDF format. A complete DQM or equivalent dataset will be submitted within 45 days of completion of the Project. If available, the CPRA will also submit Automatic Identification System data for vessels qualifying under the International Maritime Organization's International Convention for the Safety of Life at Sea.

Dredge Operation

Dredging will be performed so that the cutterhead or hopper dredges excavate material in a systematic, uniform manner to an overall cut depth not to exceed that which has been permitted.

Submittal of Production and Volume Information

The CPRA, in cooperation with the dredge operator, shall submit to BOEM on a biweekly basis a summary of the dredge track lines, outlining any deviations from the original plan. A color-coded plot of the cutterhead or drag arms will be submitted, showing any horizontal or vertical dredge violations. The dredge track lines shall show dredge status: hoteling; dredging; transiting; or unloading. This map will be provided in PDF format.

The CPRA will provide at least a biweekly update of the construction progress, including estimated volumetric production rates to BOEM. The biweekly deliverables will be provided electronically to dredgeinfo@boem.gov. The Project completion report, as described below, will also include production and volume information, including Daily Operational Reports.

Preconstruction Notification of Activity In or Near the Borrow Area

The CPRA will invite BOEM to attend a preconstruction meeting that describes the CPRA and/or its agents' plan and schedule to construct the project.

The CPRA will notify BOEM at dredgeinfo@boem.gov of the commencement and termination of operations at the borrow area within 24 hours after the CPRA receives such notification from its contractor(s) for the Project. BOEM will notify the CPRA in a timely manner of any OCS activity within

the U.S. Department of the Interior's jurisdiction that may adversely affect the CPRA's ability to use OCS sand for the project.

Local Notice to Mariners

The CPRA shall require its contractor(s) for the Project to place a notice in the U.S. Coast Guard's Local Notice to Mariners regarding the timeframe and location of dredging and construction operations in advance of commencement of dredging.

Marine Pollution Control and Contingency Plan

The CPRA will require its contractor(s) and subcontractor(s) to prepare for and take all necessary precautions to prevent discharges of oil and releases of waste and hazardous materials that may impair water quality. In the event of an occurrence, notification and response will be in accordance with applicable requirements of 40 CFR part 300. All dredging and support operations shall be compliant with the U.S. Coast Guard's regulations and the U.S. Environmental Protection Agency's Vessel General Permit, as applicable. The CPRA will notify BOEM of any occurrences and remedial actions and will provide copies of reports of the incident and resultant actions at dredgeinfo@boem.gov.

Encounter of Ordnance

If any ordnance is encountered while conducting dredging activities at Ship Shoal, the CPRA will report the discovery within 24 hours to the Regional Supervisor, Office of Environment, Gulf of Mexico OCS Region, at 504-736-2759 and dredgeinfo@boem.gov.

Bathymetric Surveys

In order to demonstrate that bottom-disturbing activity did not occur outside of the approved area and to ensure that dredging is consistent with borrow design and avoidance buffers, the CPRA will provide BOEM with pre- and post-dredging bathymetric surveys of the borrow area. The pre-dredging survey of the Borrow Areas will be conducted within 90 days prior to dredging, and the data will be provided to BOEM for review, allowing for a minimum of 7 working days for BOEM to provide concurrence prior to the commencement of dredging. A qualified hydrographic surveyor, independent from the dredging/construction contractor must conduct, oversee, and approve the survey before transmitting to BOEM. The post-dredging survey of the Borrow Areas will be conducted within 30 days after the completion of dredging. BOEM recommends that the CPRA conduct additional bathymetric surveys of the Borrow Areas 1 and 3 years after the completion of dredging to document borrow area evolution and to provide information to inform future decisions and consultations regarding the use of OCS sand resources. Surveys, error analysis, and reporting will be performed in accordance with the most recent edition of the National Oceanic and Atmospheric Administration's Office of Coast Survey Hydrographic Survey Field Procedure Manual. Survey standards and requirements are specified and can be found on the Coast Survey Document Library (https://www.nauticalcharts.noaa.gov/hsd/specs/specs.htm). For bathymetric surveys, 100 percent coverage using multi-beam bathymetric survey methods is required. All bathymetric data will be roll, pitch, heave, and tide corrected using best practices. Sound velocity corrections will be applied based on measurements made during and throughout the duration of the survey using a profiling sound velocity meter to obtain water column sound velocities with casts that log the entire water column to the seafloor. Survey lines of the specific dredge area will be established at intervals necessary to provide 100 percent coverage. All survey lines will extend at least 100 m (328 ft) beyond the edge of the Borrow Area limits as defined in this lease. All data will be collected in such a manner that post-dredging bathymetric surveys are compatible with the pre-dredging bathymetric survey data to enable the latter to be subtracted from the former to calculate the volume of sand removed, the shape of the excavation, and the nature of post-dredging bathymetric change. Pre-dredge bathymetric survey transects will be reoccupied during the post-dredging surveys. Surveys will be conducted using

kinematic GPS referenced to a GPS base station occupying an established (North American Vertical Datum of 1988 [NAVD 88] vertical control) monument within 15 kilometers (9 miles) of the survey area, a National Geodetic Survey real-time network, or a water-level gauge deployed within the vicinity of the Borrow Areas and referenced to an established monument (NAVD 88 vertical control) unless alternative methods are approved by BOEM. Pre- and post-dredging surveys will be referenced to the same water-level gauge, tide gauge, real-time network, benchmark, or BOEM-approved method. An uncertainty or error analysis will be conducted on the bathymetric dataset based on calculated differences of measured elevations (depths) at all transect crossings (also note that other best practices typically employed to identify potential error or quantify uncertainty, such as daily bar-checks, will be conducted and documented). Methods and results of the uncertainty analysis report, field notes, and metadata must be submitted to BOEM with the processed bathymetric data products.

Copies of processed pre-dredging and post-dredging hydrographic data will be submitted to BOEM via dredgeinfo@boem.gov within 30 days after each survey is completed. Pre-dredging bathymetric survey results and attendant products must be provided to BOEM for approval, and BOEM must review and deem them acceptable prior to commencement of dredging activity. If data accuracy, coverage, quality, or other parameters for either pre- or post-dredging surveys are not sufficient to provide for accurate comparisons between the pre-dredge and post-dredge surveys (e.g. do not meet specifications and standards discussed or referenced above), BOEM may require that a new survey (at the pre-dredge and/or post-dredge phase) be conducted.

Oil and Gas Infrastructure

In the Conveyance Corridors, the Project Technical Specifications will require best management practices for sediment pipeline installation, maintenance, and removal to avoid impacts when the sediment pipeline crosses buried oil and gas pipelines. BOEM has provided the CPRA with information delineating the locations of oil and gas pipelines based on the survey documentation provided to BOEM by pipeline operators at the time of pipeline installation.

The CPRA or their contractor(s) shall conduct a pre-dredging magnetometer survey within 60 days prior to mobilization of equipment to the OCS. This survey can be conducted simultaneously with the pre-dredge bathymetry survey and must be submitted to BOEM for approval prior to commencement of bottom-disturbing activities.

The CPRA shall notify the current BSEE pipeline rights-of-way (ROW) permit holder(s) 4 weeks prior to the commencement of dredging operations so that the ROW permit holder(s) may take precautions to mark its pipeline segment if they choose to do so. Documentation and outcome of communication between Pipe Line Companies and/or current ROW holders and the CPRA must be provided to the Regional Supervisor, Office of Environment, Bureau of Ocean Energy Management, Gulf of Mexico OCS Region, 1201 Elmwood Park Boulevard, New Orleans, Louisiana 70123 and to dredgeinfo@boem.gov before the commencement of dredging. It is incumbent upon the CPRA to request a current list of all oil and gas infrastructure, including, but not limited to, ROW permit holders from BOEM at the above contact in order to comply with the lease.

During all dredging operations, the CPRA shall require its contractor to observe a minimum "no dredge" and no bottom-disturbing activity (including anchoring and spudding) setback distance of 1,000 ft (305 m) from existing pipelines and all other oil- and gas-related infrastructure. The CPRA will immediately notify the Regional Supervisor, Office of Environment, Bureau of Ocean Energy Management, Gulf of Mexico OCS Region, at 504-736-2759 and dredgeinfo@boem.gov if any oil and gas infrastructure on the OCS is disturbed during the course of the Project.

BOEM reserves the right to require additional pre-dredging shallow hazards surveys to locate the position of existing pipelines and other seabed infrastructure in the wake of a severe storm event or availability of new information suggesting there may be hazards in the area.

Archaeological Resources

Onshore Prehistoric or Historic Resources

If the CPRA discovers any previously unknown historic or archeological remains while accomplishing the Project onshore, then the CPRA will notify BOEM and COE of any findings. The CPRA will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places. All parties shall follow the "Unanticipated Discoveries Plan" and the National Historic Preservation Act Section 106 guidelines to determine and implement future actions, which may include data recovery and resource avoidance.

Offshore Prehistoric or Historic Resources

Archeological and hazard surveys were conducted at the borrow areas and along the temporary dredge pipeline corridor, and these data were used to conduct an assessment of the potential for both historic and prehistoric resources within those areas. The survey results and interpretations resulted in identification of a total of six targets, comprised of 34 individual magnetic anomalies and 2 sonar contacts indicative of potential cultural resources. Each target, along with its associated magnetic anomalies and sonar contacts, is listed by area in Table 1. All bottom-disturbing activities conducted under this Negotiated Noncompetitive Lease (including, but not limited to, dredging, anchoring, and spudding) must avoid these targets by the minimum setback distance provided in Table 1. An additional two targets were initially identified within and/or adjacent to the South Pelto Borrow Areas; however, those targets have been subsequently investigated by BOEM's archaeologists and determined not to be historic resources. No further avoidance of these targets is required and they are not listed in Table 1.

In the event that the CPRA or their contractors (e.g., dredge operators, hydrographic surveyors, or endangered species observers) discover any archaeological resource while conducting operations in the vicinity of the borrow areas, dredge pipeline corridor, or pump-out operations, the CPRA must require that dredge and/or pump-out operations be halted immediately within 305 m (1,000 ft) of the area of discovery. The CPRA must then immediately report the discovery to the Regional Supervisor, Office of Environment, Bureau of Ocean Energy Management, Gulf of Mexico OCS Region at (504) 736-2759 and the designated BOEM, Gulf of Mexico OCS Region, Marine Minerals Program Point of Contact. If investigations determine that the resource is significant, the Parties will together determine how best to protect it.

Table 1

Magnetic Anomalies and Sonar Contacts to Avoid
(Coordinates in are in Louisiana State Plane, South Zone [NAD 83])

Project Area	Target	Northing (feet)	Easting (feet)	Avoidance Radius (feet)
Ship Shoal BA				
	7	149,540.957	3,491,468.957	100
		149,709.893	3,491,285.935	400
		149,862.086	3,491,275.582	550
		150,028.760	3,491,270.060	600
		150,192.083	3,491,285.847	780
		150,361.727	3,491,268.464	900
		150,517.840	3,491,251.302	900
		150,681.900	3,491,544.999	100
		150,681.134	3,491,270.549	700
		150,855.215	3,491,450.766	100
		150,855.294	3,491,509.436	100
	10	145,947.069	3,496,936.892	350
		146,112.803	3,496,946.069	300
		146,260.726	3,496,944.407	260
	11	147,305.159	3,491,579.872	100
		147,209.156	3,491,616.874	100
		147,294.026	3,491,768.212	120
		147,510.021	3,491,771.419	120
		147,243.896	3,491,732.043	200
		147,406.288	3,491,819.101	100
		147,560.112	3,491,789.948	125
West Belle Marsh BA/Pump-out				
	WBPA-5	203,094.5	3,625,091.6	350
		202,886.3	3,625,205.1	375
		203,147.46	3,624,974.92	300
West Belle CC				
	WBPE-1	213,590.6	3,624,324.8	175
		213,581.0	3,624,452.4	50
		213,563.0	3,624,367.9	125
		213,575.0	3,624,287.8	180
		213,591.72	3,624,271.00	225
	WBPE-2	211,901.0	3,624,070.8	100
		212,033.6	3,624,094.5	100
		211,974.2	3,624,156.2	75
		212,017.6	3,624,121.7	100
		212,030.6	3,624,037.2	100
		211,847.7	3,624,014.1	100
		211,989.1	3,624,152.4	75

Project Completion Report

A project completion report will be submitted by the CPRA to BOEM within 60 days following completion of the activities authorized under the lease. This report and supporting materials should be sent to the Regional Supervisor, Office of Environment, Bureau of Ocean Energy Management, Gulf of Mexico OCS Region, Mail Stop GM 633D, 1201 Elmwood Park Boulevard, New Orleans, Louisiana 70123, and to dredgeinfo@boem.gov. The report shall contain, at a minimum, the following information:

- the names and titles of the project managers overseeing the effort (for the CPRA, engineering firm [if applicable], and contractor), including contact information (i.e., telephone numbers, mailing addresses, and email addresses);
- the location and description of the project, including the final total volume of material extracted from the borrow area and the volume of material actually placed on the beach or shoreline (including a description of the volume calculation method used to determine these volumes);
- ASCII files containing the x, y, z and time stamp of the cutterhead or drag arm locations;
- a narrative describing the final, as-built features, boundaries, and acreage, including the restored beach width and length;
- a table, an example of which is illustrated below, showing the various key project cost elements;

Item	Cost Incurred as of Construction Completion ($)
Construction	
Engineering and design	
Inspections/contract administration	
Total	

- a table, an example of which is illustrated below, showing the various items of work construction, final quantities, and monetary amounts;

Item No.	Item	Estimated Quantity	Final Quantity
1	Mobilization and demobilization		
2	Beach fill		
3	Any beach or offshore hard structure placed or removed		

- a listing of construction and construction oversight information, including the prime and subcontractor(s), contract costs, etc.;
- a list of all major equipment used to construct the project;
- a narrative discussing the construction sequences and activities, and, if applicable, any problems encountered and solutions;
- a list and description of any construction change orders issued, if applicable;

- a list and description of any safety-related issues or accidents reported during the life of the project;
- a narrative and any appropriate tables describing any environmental surveys or efforts associated with the project and costs associated with these surveys or efforts;
- a table listing significant construction dates beginning with bid opening and ending with final acceptance of the Project by the CPRA;
- digital appendices containing the as-built drawings, beach-fill cross-sections, and survey data; and
- any additional pertinent comments.

Environmental and Reporting Compliance

The CPRA will designate, in advance of construction, a single point of contact responsible for facilitation of compliance with all lease requirements. The contact information will be provided to BOEM at dredgeinfo@boem.gov at least 30 days in advance of mobilization of dredging and construction equipment to the OCS.

Failure to reasonably comply with these requirements may be a basis for BOEM to refer compliance issues to BSEE.