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UNITED STATES DEPARTMENT OF THE INTERIOR

MINERALS MANAGEMENT SERVICE

Gulf of Mexico OCS Region

New Orleans, Louisiana

FINAL

SITE-SPECIFIC ENVIRONMENTAL ASSESSMENT

STRUCTURE-REMOVAL APPLICATION

ES/SR No. 07-151, 07-152

Assessment of the Environmental Impacts
of
the Proposal to Remove Platform "A" Deck and Platform "B" Deck
in
South Pass Area, Block 62
Lease OCS-G 01294 U
by Apache Corporation

Date Submitted: December 2007

Commencement Date: August 2008

Prepared by:

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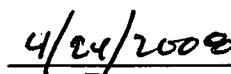
SITE-SPECIFIC ENVIRONMENTAL ASSESSMENT/FONSI/EIS DETERMINATION

~~Apache Corporation's applications to remove Platform "A" Deck and Platform "B" Deck and reef the toppled platforms in place in South Pass Area, Block 62, OCS-G 01294 using nonexplosive severance methods have been reviewed. The Mississippi Artificial Reef Program (MARF) has accepted the jackets and the reef sites have been approved by the Army Corps of Engineers and MARF. Our SEA, ES/SR 07-151, 07-152, on the subject actions is complete and results in a Finding of No Significant Impact (FONSI). Based on the conclusions of the SEA, there is no evidence to indicate that the proposed actions will significantly (40 CFR 1508.27) affect the quality of the human environment. Preparation of an environmental impact statement is not required. Mitigation is imposed to ensure environmental protection, consistent environmental policy and safety as required by the National Environmental Policy Act (NEPA), as amended; or measures needed for compliance with 40 CFR 1500.2(f) regarding the requirement for Federal agencies to avoid or minimize any possible adverse affects of their actions upon the quality of the human environment. This Finding is valid only insofar as the following conditions are imposed:~~

PROGRESSIVE-TRANSPORT NOTIFICATION: In accordance with OCSLA requirements (30CFR§250.1727(g)), if at any point in your decommissioning schedule progressive-transport/"hopping" activities are required to section your jacket assembly or support material barge loading, a prior written request must be submitted and approval must be obtained from the Regional Supervisor/Field Operations. Your request to use progressive-transport must include a detailed procedural narrative and separate location plat for each "set-down" site, showing pipelines, anchor patterns for the derrick barge, and any known archaeological and/or potentially sensitive biological features. The diagram/map of the route to be taken from the initial structure location along the transport path to each site must also be submitted with your request. If the block(s) that you intend to use as "set-down" sites have not been surveyed as per NTL 2004-G05 and NTL No. 2005-G07, you may be required to conduct the necessary surveys/reporting prior to mobilizing on site and conducting any seafloor-disturbing activities.



Chief, Environmental Compliance Section
Leasing and Environment, GOM OCS Region



Date

INTRODUCTION AND BACKGROUND

The purpose of this Site-Specific Environmental Assessment (SEA) is to assess the specific impacts associated with proposed structure removal activities. This SEA implements the tiering process outlined in 40 CFR 1502.20, which encourages agencies to tier environmental documents and eliminates repetitive discussions of the same issue. The SEA is based on a Programmatic Environmental Assessment (PEA) (USDOJ, MMS 2005) which evaluates a broader spectrum of potential impacts resulting from all decommissioning operations in the Central and Western Gulf of Mexico (GOM) and the 181/189 Lease Sale Area of the Outer Continental Shelf (OCS). In addition to the analyses, a discussion of the legal and regulatory mandates to remove abandoned oil and gas structures from Federal Waters can be found in the PEA.

This SEA conforms to the Minerals Management Service (MMS) and other appropriate guidelines for preparing environmental assessments by tiering to the PEA, and by use of reference to related environmental documents. It presents site-specific data regarding the proposed structure removal activities and evaluates the potential impacts. Mitigation measures are contained in this document to lessen potential impacts. Preparation of this SEA has allowed the determination of whether a Finding of No Significant Impact (FONSI) is appropriate or whether further assessment of the proposal is necessary.

I. DESCRIPTION AND NEED FOR THE ACTION

Apache Corporation proposes to remove Platform "A" Deck and Platform "B" Deck and reef the toppled platforms in place in South Pass Area, Block 62, OCS-G 01294 using nonexplosive severance methods. The Mississippi Artificial Reef Program (MARF) has accepted the jackets and the reef sites have been approved by the Army Corps of Engineers and MARF. The structures are located 85 miles south of Biloxi, Mississippi at a water depth of 322-340 feet, and lie approximately 17 miles from the nearest Louisiana shoreline. Operations will be conducted from an onshore support base in Fourchon, Louisiana. The decks will be removed and disposed of onshore. Jacket sections and conductors will be left in place at the reef site. The pipelines have been abandoned and the wells have been plugged and abandoned. The operator will remove all casing, wellhead equipment, and piling to a depth of at least 15 feet below the mudline. The maximum anchor radius employed by the lift vessel/derrick barge will be no greater than 4,000ft. Apache Corporation's structure-removal permit applications includes additional information about the proposed activities and is incorporated herein by reference.

A discussion of the legal and regulatory mandates to remove abandoned oil and gas structures from Federal Waters can be found in the PEA. According to the operator, the structure will be removed because the platform was destroyed by Hurricane Katrina (Apache Corporation, 2007).

II. ALTERNATIVES TO THE PROPOSED ACTION

MMS initially discussed various structure removal techniques in the Final Environmental Impact Statement (FEIS) for Proposed Oil and Gas Lease Sales 118 and 122 (USDOJ, MMS,

1988) and in the PEA. Updated information is found in the FEIS for Gulf of Mexico OCS Oil and Gas Lease Sales: 2007-2012 (USDOJ, MMS, 2007). Refer to the FEIS (USDOJ, MMS, 1988 and 2007) and PEA for detailed information concerning alternative methods of structure removal. Alternatives to the proposed structure removal with mitigation originally submitted are:

A. NON-REMOVAL OF THE STRUCTURE

The alternative to the proposed structure removal as originally submitted is non-removal. Non-removal of the structure would represent a conflict with Federal legal and regulatory requirements, which mandate the timely removal of obsolete or abandoned structures within a period of one year after termination of the lease, or upon termination of a right-of-use and easement. Therefore, non-removal is not an acceptable alternative.

B. REMOVAL OF THE STRUCTURE AS PROPOSED WITH ADDED MITIGATION

Measures that Apache Corporation proposes to limit potential environmental effects are discussed in the structure removal application and are incorporated herein by reference. Outer Continental Shelf Operating Regulations, Notices to Lessees and Operators, and other regulations and laws were identified throughout this assessment as existing mitigation for potential environmental effects associated with the proposed structure removal application. Additional information can be found in the PEA.

The following mitigative measures will be included in MMS's approval of the proposed structure removal to ensure environmental protection, consistent environmental policy, and safety as required by the National Environmental Policy Act:

PROGRESSIVE-TRANSPORT NOTIFICATION: In accordance with OCSLA requirements (30CFR§250.1727(g)), if at any point in your decommissioning schedule progressive-transport/"hopping" activities are required to section your jacket assembly or support material barge loading, a prior written request must be submitted and approval must be obtained from the Regional Supervisor/Field Operations. Your request to use progressive-transport must include a detailed procedural narrative and separate location plat for each "set-down" site, showing pipelines, anchor patterns for the derrick barge, and any known archaeological and/or potentially sensitive biological features. The diagram/map of the route to be taken from the initial structure location along the transport path to each site must also be submitted with your request. If the block(s) that you intend to use as "set-down" sites have not been surveyed as per NTL 2004-G05 and NTL No. 2005-G07, you may be required to conduct the necessary surveys/reporting prior to mobilizing on site and conducting any seafloor-disturbing activities.

III. ENVIRONMENTAL EFFECTS, SOCIOECONOMIC CONCERNS, AND OTHER CONSIDERATIONS.

In accordance with *The National Environmental Policy Act (NEPA) of 1969, as amended (Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, 4[b], Sept. 13, 1982)* and the

Council on Environmental Quality (CEQ) implementing regulations (40 CFR Sec. 1502.15) *Affected Environment*, the following potential environmental effects were identified from the proposed action. ~~Mitigative measures are included to eliminate or reduce the potential effect~~ from the proposed activities to a level of insignificance as described in 40 CFR Sec. 1508.27

A. PHYSICAL ENVIRONMENT

A discussion of environmental geology, geologic hazards, meteorological conditions, physical and chemical oceanography, water quality and air quality can be found in the PEA. The proposed structure-removal activities are in an area of sediment instability (mud flows, slumps, or slides). The viability of a reef in place in this area has not been determined. Other potential impacts from the proposed activities to the physical environment have been considered, but were deemed insignificant (40 CFR 1508.27) and are not discussed in this SEA.

B. BIOLOGICAL ENVIRONMENT

A discussion of coastal habitats, protected, endangered and threatened species (marine mammals and sea turtles), and sensitive marine habitats are discussed in the PEA. A discussion of marine mammals occurring across the Gulf of Mexico (GOM) and an assessment of the potential impacts of structure-removal activities on marine mammals can be found in the PEA. Fritts et al. (1983) conducted aerial surveys across a 9,514 square-mile area of GOM waters. Results of these surveys indicate that the bottlenose dolphin is by far the most likely marine mammals to be encountered in the GOM. Since the proposed structure removal will not utilize explosives, no significant impacts are expected on marine mammals.

A discussion of sea turtles occurring across the central and western GOM and an assessment of the potential impacts of structure-removal activities on sea turtles can be found in the PEA. Studies by Fritts et al. (1983) and Fuller and Tappan (1986) as well as stranding data from the Sea Turtle Stranding and Salvage Network (Teas, 1995) indicate that sea turtles may occur in the vicinity of the proposed activities and therefore could be impacted by the structure-removal operations. As outlined in the PEA, sea turtles could be impacted by site-clearance trawling operations since the Turtle Excluder Devices (TEDs) are pulled from the nets prior to clearance work. However, guidelines provided in the site-clearance NTL No. 98-26 should help prevent any potential sea turtle mortalities. Definitive information on the probability of encountering sea turtles at the removal site during explosive operations is scarce.

Other potential impacts from the proposed activities to the biological environment have been considered, but were deemed insignificant (40 CFR 1508.27) and are not discussed in this SEA.

C. OTHER CONSIDERATIONS

A discussion of socioeconomic, commercial and recreational fisheries, archaeological resources, military warning areas, explosive dumping areas, navigation and shipping areas, pipelines, cables, other mineral uses, and health and human safety can be found in the PEA referenced in the Introduction.

Major impact-producing factors of decommissioning activities that could affect both prehistoric and historic archaeological resources are direct physical contact from anchoring, progressive-transport (i.e., jacket-hopping), and trawling activities associated with site clearance. Blocks with a high probability for the occurrence of prehistoric and/or historic archaeological resources are listed in the CPA, EPA, and WPA EIS's. Prehistoric archaeological resources include sites, structures, and objects such as shell middens, earth middens, campsites, kill sites, tool manufacturing areas, ceremonial complexes, and earthworks. Blocks with a high probability for prehistoric archaeological resources are found landward of a line that roughly follows the 60-m bathymetric contour.

Structure removal activities with the most potential to impact archaeological resources include anchoring, jacket hopping, and trawling associated with the site clearance process. Anchoring associated with platform removal may physically impact prehistoric and/or historic archaeological resources. The removal of offshore structures through progressive-transport (or jacket-hopping) has the ability to impact prehistoric and/or historic archaeological resources along the path used to move into shallow water. The activity most likely to have the greatest impact on prehistoric and/or historic archaeological resources comes from trawling associated with the site clearance and verification process. The use of shrimp trawlers to verify seafloor clearance can seriously impact any archaeological resources encountered, particularly in lease blocks that were developed prior to the requirement of an archaeological survey and assessment.

However, conditional to archaeological review of the proposed action along with the implementation of proper avoidance mitigation, the potential impacts of the proposed action on archaeological resources are not expected to be significant.

Other environmental effects have been considered, but potential impacts from the proposed activities were deemed insignificant (40 CFR 1508.27) and are not discussed further in this SEA.

MMS continues to consider the overall impacts of structure removals on commercial fishing to be low. MMS policy of encouraging an active rigs-to-reefs program will help to offset cumulative structure-removal impacts to fisheries resources.

D. UNAVOIDABLE ADVERSE IMPACTS

A discussion of unavoidable adverse impacts can be found in the PEA. Two areas of ongoing concern have been the potential impact to protected, threatened, and/or endangered species and potential loss of habitat to the marine environment. Both topics are discussed in the PEA and previously in this document. A more recent issue of concern has surfaced regarding the impacts of explosive structure-removals on reef fish stocks. Although the impacts to commercial and recreational fisheries are considered to be low, further studies information about this issue will be available in the future. Other unavoidable adverse impacts are considered to be minor.

IV. PUBLIC OPINION

A discussion of public concerns regarding structure removals can be found in the PEA. No public comments have been received regarding the proposed structure-removal operations.

V. CONSULTATION AND COORDINATION

Consultation and interagency coordination efforts were undertaken during and subsequent to the preparation of the 2005 PEA. NMFS concluded that this category of structure removal activities will not likely jeopardize the continued existence of any threatened or endangered species under their purview. Additionally, they concluded that this type of "standard" structure removal activity may result in injury or mortality of loggerhead, Kemp's ridley, green, hawksbill, and leatherback turtles. Therefore, they established a cumulative level of incidental take and discussed various measures necessary to monitor and minimize this impact. As a result of these efforts, a Biological Opinion (BiOp) and Incidental Take Statement (ITS) were issued in August of 2006. In accordance with the provisions of Section 7 of the Endangered Species Act (ESA), as amended, the proposed structure removal operations are covered by the BiOp and ITS, which address the explosive-severance categories established in the PEA (USDOC, 2006). The mitigation proposed in Appendix A for this proposal was taken from the terms and conditions of the BiOp and ITS. A similar incidental-take rulemaking effort is currently being conducted under Subpart I of the Marine Mammal Protection Act.

The Mississippi Artificial Reef Program (MARP) has accepted the jackets and the reef sites have been approved by the Army Corps of Engineers and MARP. The proposed reef sites will provide enough area for future habitat development with at least four more rig jackets in each site. The proposed structure-removal activities are in an area of sediment instability (mud flows, slumps, or slides). The viability of a reef in place in this area has not been determined and is being reviewed by MMS.

VI. BIBLIOGRAPHY AND SPECIAL REFERENCES

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- Fuller, D.A. and A.M. Tappan. 1986. The occurrence of sea turtles in Louisiana coastal waters. Coastal Fisheries Institute. Center for Wetland Resources. Louisiana State University. Baton Rouge, LA.
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VII. PREPARER

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