



United States Department of the Interior




MINERALS MANAGEMENT SERVICE
Alaska Outer Continental Shelf Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5823

JUN 15 2009

Memorandum

To: Regional Supervisor, Field Operations

From: Regional Supervisor, Leasing and Environment 

Subject: Categorical Exclusion Review of Shell Gulf of Mexico Inc.'s 2009 Ancillary Activities for the Chukchi Sea, Alaska

We have concluded our Categorical Exclusion Review (CER) (attachment) of Shell proposed 2009 ancillary activities in the Chukchi Sea (*Ancillary Activity Authorization Request for Shallow Hazard and Site Clearance Surveys and Scientific Data Device Deployment in the Chukchi Sea, Alaska, During 2009*, dated May 20, 2008). The objective of our CER was to determine whether the proposed activities that are categorically excluded under 516 DM 15 meet any of the extraordinary circumstances at 43 C.F.R. Part 46.

Shell is required to conduct site clearance and shallow hazards surveys to provide supporting information for their anticipated exploration plan (30 CFR 250.214(e) and (g)). The surveys would be conducted in compliance with MMS requirements set out in the Notice to Lessees (NTL) No. 05-A01 *Shallow Hazards Survey and Evaluation for OCS Exploration and Development Drilling* and NTL No. 05-A03 *Archaeological Survey and Evaluation for Exploration and Development Activities*. Shell's proposed activities comply with applicable lease stipulations.

We have determined that the proposed activities are categorically excluded and do not meet any of the criteria for extraordinary circumstances listed in 43 C.F.R. 46.215(a)-(l) under which actions, otherwise covered by a categorical exclusion, would require further analysis under NEPA. 43 C.F.R. 46.205(c).

In addition, we recommend that Shell:

1. be advised that MMS considers the following documents referenced in the *Ancillary Activity Authorization Request for Site Clearance and Shallow Hazards Surveys and Scientific Data Device Deployment in the Chukchi Sea, Alaska, During 2009*, dated May 18, 2009, to be an integral part of the proposed activities. The monitoring and mitigation measures specified in these documents are required aspects of the activities being authorized by MMS. Mitigation and monitoring requirements in the NMFS and FWS

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authorizations under the MMPA would have precedence over this and any MMS-generated marine mammal protection requirements.

- a. Shell's Marine Mammal Monitoring and Mitigation Plan (4MP) for 2009
 - b. Shell's Plan of Cooperation with Chukchi Sea subsistence communities for 2009
 - c. Shell's Planned Wainwright Communication Center for 2009
2. be advised of measures to further avoid or minimize possible adverse environmental effects of their proposed action (see attached);
 3. provide MMS copies of their 2009 MMPA authorizations from the NMFS (IHA) and FWS (LOA).

Please contact me to discuss our CER further if you have any questions.

Attachments: *Categorical Exclusion Review, Shell Gulf of Mexico Inc., Site Clearance and Shallow Hazards Surveys and Scientific Data Device Deployment Chukchi Sea, Alaska, 2009*
Additional recommended measures

cc: Regional Director

Categorical Exclusion Review

Shell Gulf of Mexico Inc. Site Clearance and Shallow Hazards Surveys and Scientific Data Device Deployment Chukchi Sea, Alaska, 2009

A categorical exclusion is, by definition, “a category of actions which do not individually or cumulatively have a significant effect on the human environment...and for which, therefore, neither an environmental assessment (EA) nor an environmental impact statement (EIS) is required” (40 CFR 1508.4). The concept of categorical exclusions was created by the Council on Environmental Quality to reduce the amount of unnecessary paperwork and delay associated with National Environmental Policy Act (NEPA) compliance (reference 40 CFR 1500.4(p) and 1500.4(k)).

The categorical exclusions for Minerals Management Service (MMS) activities are found at 516 Departmental Manual (DM) Chapter 15 (516 DM 15). The following categorical exclusion is applicable to the Shell Gulf of Mexico Inc. (Shell) proposed 2009 ancillary activities on the Chukchi Sea Outer Continental Shelf (OCS) (*Ancillary Activity Authorization Request for Site Clearance and Shallow Hazards Surveys and Scientific Data Device Deployment in the Chukchi Sea, Alaska, During 2009, dated May 18, 2009*):

516 DM 15.4C (13) (*Ancillary Activities*), as defined in 30 CFR Part 250 (*Oil and Gas and Sulphur Operations in the Outer Continental Shelf, Subpart B-Plans and Information*), Final Rule (FR Vol. 70, No. 167, dated August 30, 2005). Before or after an Exploration Plan, Development and Production Plan, or Development Operations Coordination Document is submitted, the regulations in this part may require, or the Regional Supervisor may direct that ancillary activities be conducted (§§ 250.207 to 250.210). Ancillary activities include geological and geophysical-related exploration and development activities; geological and high-resolution geophysical, geotechnical, archaeological, biological, physical oceanographic, meteorological, socioeconomic, or other surveys; or studies that model potential oil and hazardous substance spills, drilling muds and cutting discharges, projected air emissions, or potential hydrogen sulfide releases.

The objective of the Categorical Exclusion Review (CER) is to determine whether a specific proposed action that is categorically excluded meets any of the extraordinary circumstances (43 C.F.R. Part 46) and whether an EA must be prepared.

Description of Shell’s Proposed Ancillary Activities

During the 2009 open water season, Shell proposes to conduct site clearance and shallow hazards surveys on their OCS Sale 193 leases at six areas: Burger (2 sites), Bird of Paradise, Ulu, Honeyguide, and Shoebill/Snickers prospects (figure 1). The leases are located approximately 60 to 170 miles west of Wainwright. The proposed surveys are a continuation of surveys conducted by Shell in the Chukchi Sea in 2008. Shell proposes using equipment and a vessel similar to those used in 2008. Shell anticipates beginning survey activities on or about August 1,

2009. The total program will last a maximum 50 days of active data acquisition. Shell anticipates shooting approximately 480 km (298 mi) of survey lines. All survey activities will be beyond 70 miles from shore.

Shell is required to conduct site clearance and shallow hazards surveys to provide supporting information for their anticipated exploration plan (30 CFR 250.214(e) and (g)). Site clearance and shallow hazards surveys are required by MMS in support engineering and procedures planning for safe operations and protection of sensitive environmental resources. Information from the surveys will be used to evaluate the seafloor and shallow sub-seafloor at the prospective exploration drilling locations, focusing on the depth to seafloor, topography, the potential for shallow faults or gas zones, and the presence of archaeological features. The surveys are conducted in compliance with MMS requirements set out in the Notice to Lessees (NTL) No. 05-A01 *Shallow Hazards Survey and Evaluation for OCS Exploration and Development Drilling* and NTL No. 05-A03 *Archaeological Survey and Evaluation for Exploration and Development Activities*. Shell's proposed activities comply with applicable lease stipulations.

The vessel conducting the surveys will be the *R/V Norseman II (Norseman II)*, the *R/V Mt. Mitchell (Mt. Mitchell)*, or a similar vessel. Periodic port calls are planned to Nome and Wainwright. No other vessels would be necessary to accomplish the proposed work. The vessel that will be conducting the site clearance and shallow hazards surveys will also be used in the deployment and retrieval of scientific data devices.

Shell is proposing to use the following acoustic instrumentation:

- An EdgeTech 4200-FS side scan sonar.
- A Kongsberg EM710 multibeam sonar.
- A Reson Seabat 8101 multibeam sonar as backup for the Kongsberg EM710.
- A precision fathometer.
- The multichannel acoustic reflection profiling system will consist of an acoustic sound source (40 cubic inch airgun array) and two streamers.
- A 2-12 kHz high-resolution GeoAcoustics GeoPulse system.
- A Marine Magnetics SeaSpy marine magnetometer.

Under Shell's Marine Mammal Monitoring and Mitigation Plan (4MP) for 2009, marine mammal observers (MMOs) will watch for and identify marine mammals; recording their numbers, distances, and reactions to the ancillary activity operations; advising personnel of the presence of mammals within or approaching the designated "safety zones;" initiating mitigation measures when appropriate; and documenting "take by harassment" as defined by NMFS. The MMOs onboard the seismic vessel will monitor the 190 and 180 dB re 1 microPa-m safety radii for pinnipeds and cetaceans, respectively, and implement appropriate mitigation, which would include ramp ups, power downs, and shut downs. Under current NMFS guidelines, "safety radii" for marine mammals around acoustic sound sources are customarily defined as the distances within which received pulse levels are ≥ 180 dB re 1 microPa-m for cetaceans and ≥ 190 dB re 1 microPa-m for pinnipeds. The ≥ 190 dB re 1 microPa-m guideline was also employed by the FWS for the animals under its jurisdiction (polar bears and walrus) in its IHA issued to Shell in 2008.

All survey activities will be beyond 70 miles from shore and well away from coastal communities or nearshore concentrations of subsistence resources. Shell will operate in the survey program under the provisions of Shell's Plan of Cooperation for 2009 with the Chukchi Sea subsistence communities. The vessel will communicate with the planned Wainwright Communication Center.

Shell has also requested authorization to deploy scientific data devices on their OCS lease blocks in the Chukchi Sea: a floating buoy to collect meteorological and oceanographic (metocean) data, and an Acoustic Waves and Currents (AWAC) meter to collect current data at the seafloor in Chukchi Sea. The scientific data devices will be deployed in the vicinity of Shell's Burger Prospect (Burger Site Survey 1) at approximately 71.25° N., 163.2° W. The metocean buoy and the AWAC are expected to be deployed in early August 2009. The buoy will be painted in high-visibility yellow, contain a radar reflector, a strobe light, and will be registered with the U.S. Coast Guard via a Notice to Mariners. The metocean buoy will be attached to a mooring chain terminating to an approximately 2,000 pound anchor and will have a programmed release anchor, which will allow the buoy to drift with the ice pack once freezeup occurs. The AWAC meter will be deployed as a bottom-founded device that will record currents, waves, and attempt to measure ice keels for up to one year before being retrieved in a subsequent season.

Review and Findings

We have reviewed the proposed activities, applicable lease stipulations, and the extraordinary circumstances for categorical exclusions (Appendix A). We have considered relevant analyses in the following NEPA documents: (1) programmatic environmental assessment (PEA) and Finding of No Significant Impacts (FONSI) on seismic surveying activities in the Arctic Ocean OCS for the 2006 open water season (OCS EIS/EA MMS 2006-038); (2) Chukchi Sea Lease Sale 193 final EIS (OCS EIS/EA MMS 2007-026); and (3) Draft Programmatic EIS (PEIS) for Seismic Surveys in the Beaufort and Chukchi Seas (OCS EIS/EA, MMS 2007-001; Feb 2007) EIS. **The proposed activities are categorically excluded and do not meet any of the criteria for extraordinary circumstances listed in 43 C.F.R. 46.215(a)-(l) under which actions, otherwise covered by a categorical exclusion, would require further analysis under NEPA. 43 C.F.R. 46.205(c).**

APPENDIX A. EXTRAORDINARY CIRCUMSTANCES REVIEW FOR CATEGORICAL EXCLUSION

PROJECT IDENTIFICATION

Operator/Project Name: Shell/site clearance and shallow hazards surveys and Scientific Data Device Deployment
 Project Type: Ancillary Activities
 Project Location: Burger, Bird of Paradise, Ulu, Honeyguide, and SE Shoebill/Snickers Prospects

Date Project Submitted: 05/18/09

Other Identifying Aspects: Chukchi Sea OCS

The Department of the Interior's extraordinary circumstances for categorically excluded actions are found at 43 C.F.R. Part 46.

Extraordinary Circumstances (EC)	EC Present	Information Source							
		Federal/State Agency		Other Correspondence	Prior NEPA	Other Studies & Reports	Staff Expertise	Other (MMS Stips, staff memo)	
		Correspondence (date)	Conversations / Meetings (date)						
2.1 Public Health and Safety (43 C.F.R. 46.215(a))	No				Chukchi Sea Lease Sale 193 and Seismic Surveys Final EIS, May 2007; Draft Programmatic EIS for Seismic Surveys, Feb 2007; Final Programmatic EA and FONSI, Seismic Surveys in the Chukchi and Beaufort seas, June 2006.		Yes		
2.2 Significant Impacts (43 C.F.R. 46.215(b))	No						Yes		
2.3 Controversial Environmental Effects (43 C.F.R. 46.215(c))	No							Yes	
2.4 Uncertain and Unknown Risks (43 C.F.R. 46.215(d))	No							Yes	
2.5 Establishes Precedent (43 C.F.R. 46.215(e))	No							Yes	
2.6 Cumulatively Significant (43 C.F.R. 46.215(f))	No							Yes	
2.7 National Register of Historic Places (43 C.F.R. 46.215(g))	No	Section 106 consultation, SHPO letter dated 9/30/08					Yes	NTL 05-A03	
2.8 Endangered/Threatened Species / Critical Habitats (43 C.F.R. 46.215(h))	No	NMFS ARBO 7/17/2008. FWS Memo to MMS RD, 4/3/2007 re: Steller's eider; FWS Sale 193 BO; FWS Programmatic BO for Polar Bears, 6/3/2008					Yes	FWS 4(d) rule (FR 73(95): 28306-28318)	

2.9 Violates Federal, State, Local Tribal Law or Requirement (43 C.F.R. 46.215(i))	No						Yes
2.10 Environmental Justice (43 C.F.R. 46.215(j))	No						Yes
2.11 Sacred Sites (43 C.F.R. 46.215(k))	No						Yes
2.12 Invasive Species (43 C.F.R. 46.215(l))	No						Yes

516 DM 15.4C (13) (Ancillary Activities), as defined in 30 CFR Part 250 (Oil and Gas and Sulphur Operations in the Outer Continental Shelf, Subpart B-Plans and Information), Final Rule (FR Vol. 70, No. 167, dated August 30, 2005). Before or after an Exploration Plan, Development and Production Plan, or Development Operations Coordination Document is submitted, the regulations in this part may require, or the Regional Supervisor may direct that ancillary activities be conducted (§§ 250.207 to 250.210). Ancillary activities include geological and geophysical-related exploration and development activities; geological and high-resolution geophysical, geotechnical, archaeological, biological, physical oceanographic, meteorological, socioeconomic, or other surveys; or studies that model potential oil and hazardous substance spills, drilling muds and cutting discharges, projected air emissions, or potential hydrogen sulfide releases.

The proposed activities are categorically excluded and do not meet any of the criteria for extraordinary circumstances listed in 43 C.F.R. 46.215(a)-(l) under which actions, otherwise covered by a categorical exclusion, would require further analysis under NEPA. 43 C.F.R. 46.205(c).

Prepared By

Name and Title: Deborah Cranswick, Chief, Environmental Analysis Section I Signature 	Date 6/12/09
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Supervisor Concurrence

Name and Title: Cleve Cowles, Regional Supervisor, Leasing and Environment Signature 	Date 6/15/09
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