



United States Department of the Interior
BUREAU OF OCEAN ENERGY MANAGEMENT

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

DEC 16 2011

Ms. Susan Childs
Shell Gulf of Mexico, Inc.
3601 C Street, Suite 1334
Anchorage, Alaska 99503

Dear Ms. Childs:

The Bureau of Ocean Energy Management (BOEM) Alaska Region has reviewed the Shell Gulf of Mexico Inc. (Shell) Revised 2012 Outer Continental Shelf Lease Exploration Plan, Chukchi Sea, Alaska (EP) for OCS Leases Y-2280, Y-2267, Y-2321, Y-2294, Y-2278, and Y-2324.

BOEM hereby approves the EP subject to the conditions below:

1. Shell must inform the Regional Supervisor for Leasing and Plans (RS/LP) before deviating from activities specified under the EP.
2. No exploratory drilling operations may be conducted under this EP until Shell has satisfied the Bureau of Safety and Environmental Enforcement (BSEE) requirements with respect to the Oil Spill Response Plan (OSRP). Once BSEE's requirements are met, Shell must submit a copy of the OSRP to the RS/LP.
3. No exploratory drilling activities can be conducted without an approved Application for a Permit to Drill (APD) issued by BSEE. Shell must submit a copy of the approved APD to the RS/LP prior to commencing drilling operations.

Shell is advised that the APD must comply with all applicable BSEE regulations and Notice to Lessee 2010-N10. In accordance with 30 CFR 250.410-418 (MODU), BSEE must receive all required information for APD approval. This includes a current Certificate of Inspection or Letter of Compliance from the U.S. Coast Guard (USCG), current documentation of any operational limitations imposed by an appropriate classification society, and other fitness requirements for the M/V Noble Discoverer (Discoverer) mobile offshore drilling unit required in accordance with 30 CFR 250.417 (Certification of the Drilling Unit).

4. In consideration of the distance to limited support infrastructure on the Chukchi coast, as well as limited drilling experience in the Chukchi Sea, and in keeping with the Secretary of the Interior's desire to proceed cautiously with oil and gas exploration and development in the Chukchi Sea, BOEM will require the following condition designed to reduce risks associated with the proposal by assuring a greater opportunity for response and cleanup in the unlikely event of a late season oil spill.

No exploratory drilling will be allowed below the last casing point set prior to penetrating a *zone capable of flowing liquid hydrocarbons in measureable quantities into the well* within 38 days of a "trigger date" established each year by BOEM, based upon the date of first ice encroachment over the drill site within any of the last 5 years. For 2012, based upon interpretation of satellite imagery for the period 2007 to 2011, BOEM has determined November 1 as the earliest date in which sea ice covered the Shell drill sites listed in the EP. Accordingly, Shell must not drill below the casing shoe of the last string of casing set before penetrating a zone capable of flowing liquid hydrocarbons in measureable quantities into the well after September 24, 2012. In all other aspects, Shell can continue to operate as conditions permit up to October 31. A new trigger date will be established by the RS/LP for each subsequent year that operations are conducted under the EP.

Consistent with adaptive management principles, the RS/LP may revise its method for determining the trigger date based upon changes to best available scientific information (i.e., availability of a reliable ice forecasting system capable of predicting with a high degree of certainty when ice will likely encroach upon the drill site locations).

5. No exploratory drilling activities can be conducted until Shell has received an approved Marine Mammal Protection Act (MMPA) authorization from the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) for the specific activity, and the RS/LP has received a corresponding Endangered Species Act Incidental Take Statement (ITS) for threatened, endangered and protected species. Shell must submit a copy of the approved IHA or LOA to the RS/LP prior to commencing operations.
6. Shell's EP includes a marine mammal monitoring program and Shell has applied for an Incidental Harassment Authorization (IHA) from the National Marine Fisheries Service (NMFS) and a Letter of Authorization (LOA) from the US Fish and Wildlife Service (USFWS). The EP describes Shell's plans for aerial monitoring, on-vessel marine mammal observers, real time acoustical recorders, and site-specific sound source verification to confirm acoustic safety zones prior to commencement of drilling operations. The RS/LP, in consultation with the NMFS and the USFWS, may modify lease operations as necessary to comply with the requirements of authorizations issued by NMFS and USFWS.
7. Shell has developed a Plan of Cooperation (POC) designed to prevent unreasonable conflicts with subsistence activities in compliance with Lease Stipulation 5 (Conflict

Avoidance Mechanisms to Protect Subsistence Whaling and Other Subsistence-harvest Activities). Stipulation 5 applies to support activities, such as vessel and aircraft traffic, that traverse the blocks listed or Federal waters landward of the sale during periods of subsistence use regardless of lease location.

No support activities may be conducted on the blocks listed or on Federal waters landward of the Sale 193 area until Shell has documented to the satisfaction of the RS/LP that the monitoring and mitigating measures detailed in the POC to prevent unreasonable conflicts with subsistence activities for the Chukchi Sea program are in place and operational prior to mobilization of each drilling season.

BOEM retains the authority to restrict lease-related use if it is determined that it is necessary to prevent unreasonable conflicts with local subsistence hunting activities. Shell must provide this office with daily summaries on POC activities and daily monitoring results including but not limited to Marine Mammal Observers' and local Subsistence Advisors' reports and notifications and Shell's responses to each incident. Shell must also include the BOEM contact number (907) 334-5200 in the Subsistence Advisors Handbook with specific instructions for the Subsistence Advisors to call BOEM if they are unable to contact Shell and/or if any subsistence use conflict has not been resolved. A copy of the handbook must be submitted to this office prior to commencement of exploratory drilling operations.

The POC states that Shell plans to have continuing engagement with local subsistence users to discuss and possibly further supplement the POC. Shell must inform the RS/LP (or designee) promptly of any deviation from or alteration of the POC that Shell intends to take as a result of these ongoing community meetings.

Shell shall inform the RS/LP of any presentation/meeting Shell intends to conduct under the POC to allow the RS/LP (or designee) to attend such engagement.

8. Prior to commencement of exploratory drilling operations, Shell must confirm the final staging location and schedule for mobilizing the designated relief well rig to the drill site and the consistency of response times for commencement and completion of a relief well with the approved EP. Confirmation must be sent to the RS/LP.

Prior to commencement of drilling operations, Shell must demonstrate that the relief well drilling unit meets the requirements of 30 CFR 250.417 and confirm that they have received approval from BSEE for the relief well drilling unit for use in the Chukchi Sea. Shell must present a copy of BSEE's approval letter to the RS/LP prior to commencing operations.

9. Shell has committed to having a subsea well capping and containment system. The system is currently in the design stage. Prior to commencement of exploratory drilling operations, Shell must confirm that they have documented and received approval from BSEE that the system is designed for the projected worst case discharge conditions. Shell must also confirm that they have documented and received approval from BSEE

regarding the procedures for deployment, installation and operation of the system under anticipated environmental conditions, including the potential presence of sea ice.

Shell will also be required to conduct a field exercise to demonstrate their ability to deploy the system. Shell must confirm that they are in compliance with any agreement concerning well capping and containment reached with BSEE.

Shell must present a copy of BSEE's approval letter to the RS/LP prior to commencing operations.

10. An orientation program that will satisfy the requirements of Lease Stipulation 2 (Orientation Program) must be submitted to the RS/LP annually for approval prior to commencing drilling operations.
11. If Shell transits to the Chukchi Sea from the Beaufort Sea during the fall bowhead whale migration and before or during Barrow's fall bowhead whale subsistence hunt, Shell shall meet with the appropriate whaling captains to coordinate vessel transit routes westward through the Beaufort Sea to prevent any deflection of the bowhead whale migration and any conflicts with Barrow's fall whaling season. Emergency operations will take precedence over this condition.
12. The Marine Mammal Observers (MMOs) on vessels underway in the Chukchi Sea must monitor the ocean waters near the vessel for surfacing whales. If a surfacing whale is observed within 300 ft (100 m) of the vessel, the vessel must disengage propellers to avoid potential propeller injury to the whale (prop strike) and, to a lesser degree, collision. Propellers must remain disengaged until the whale moves beyond 300 ft (100 m). Safety of the vessel and its personnel will take precedence over this condition.
13. In addition to the measures committed to by Shell in its Bird Strike Avoidance and Lighting Plan to comply with Lease Stipulation 7 (Lighting of Lease Structures to Minimize Effects to Spectacled and Steller's Eider), the following measures also are required pursuant to the September 3, 2009, FWS *Biological Opinion for Beaufort and Chukchi Sea Program Area Lease Sales and Associated Seismic Surveys and Exploratory Drilling*:
 - a. Routine deck searches for dead or injured birds should be performed, especially during or following periods of darkness or inclement weather. Most avian collisions occur during periods of darkness and/or inclement weather such as rain or fog.
 - b. Birds perching on ship structures (such as antennas or rigging) should be allowed to rest and depart on their own.
 - c. All bird fatalities shall be documented and reported within 3 days to the RS/LP. Minimum information will include species, date/time, location, weather,

identification of the vessel involved and its operational status when the strike occurred. Carcasses should be returned to the sea.

Photographs are not required, but would be very helpful in verifying species as part of the collision report. If photographs are taken, FWS has requested the following views of any birds killed by collision: wingspread (if possible), top and bottom views, and head.

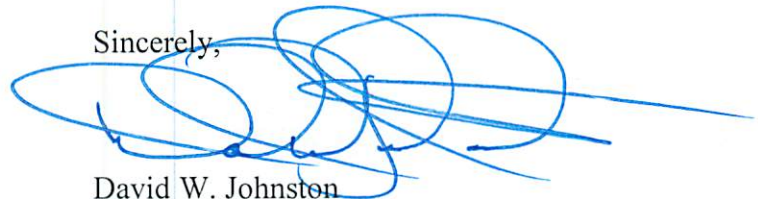
If a bird strikes and remains on the vessel, leave it to recover and depart on its own. If necessary to take it out of harm's way, move it to a dry place where it can depart on its own. If the bird does not depart after about 12 hours but is still alive, carefully return it to the sea surface.

14. Shell's fuel-transfer plan does not fully comply with the requirements of Lease Stipulation 6 to surround the fuel barge with oil-spill containment boom before fuel transfer. Prior to conducting exploratory drilling operations, Shell must either modify its fuel-transfer plans to comply with the stipulation or provide justification of how the alternative configuration would provide an equivalent level of response preparedness. This information must be submitted to the RS/LP for approval.
15. No exploratory activities may be conducted until BOEM completes its ongoing Endangered Species Act consultation with the U.S. Fish and Wildlife Service.

As provided by 30 CFR 550.284, BOEM will annually conduct a pre/post review of the activities conducted under the approved EP and may require Shell to submit updated information or revise the approved EP. BOEM plans to conduct this review annually, prior to each subsequent open water season, but may review the plan earlier if it receives substantial new information.

If you have any questions regarding this action, please contact me directly at (907) 334-5200.

Sincerely,



David W. Johnston
Regional Supervisor, Leasing and Plans.

cc: State of Alaska - Office of the Governor
Office of the Governor - EXECUTIVE OFFICE ANCH, ATT: Jeffrey Jones, Special Staff Assistant
Department of Natural Resources OPM-OFFICE PRJ MGMT/PERMIT, ATT: Sara Longan
Alaska Oil & Gas Conservation Commission, ATT: Steve Davies
Department of Natural Resources Division of Geological and Geophysical Surveys, ATT: Patty Burns
Department of Environmental Conservation Commissioner's Office
Department of Environmental Conservation Commissioner's Office, Prog Coordinator, ATT: Gary Mendivil
U.S. Department of Environmental Conservation, Division of Water
U.S. Department of Environmental Conservation, Division of Air
U.S. Department of Environmental Conservation, Spill Response
U.S. Department of Environmental Conservation, Division of Spill Prevention & Response, ATT: Larry Iwamoto
U.S. Department of Environmental Conservation, Division of Spill Prevention & Response, ATT: Dale W. Gardner
U.S. Department of the Interior, Office of the Secretary, Environmental Policy and Compliance, ATT: Pamela Bergmann
U.S. Fish and Wildlife Service Region 7, Regional Director, ATT: Geoff Haskett
U.S. Fish & Wildlife Service – Endangered Species, ATT: Tim Jennings
U.S. Fish & Wildlife Service – Endangered Species, ATT: Ted Swern
U.S. Fish & Wildlife Service – Marine Mammal Management, ATT: Craig Perham
U.S. Fish & Wildlife Service – Marine Mammal Management, ATT: Christopher Putnam
U.S. Fish & Wildlife Service – Marine Mammal Management, ATT: Joel GarlichMiller
U.S. Fish & Wildlife Service – Northern Alaska Ecological SVCS
U.S. Fish & Wildlife Service – Conservation Planning Branch, ATT: Jewel Bennett
U.S. Fish & Wildlife Service – Conservation Planning Assistance, ATT: Louise Smith
Alaska Region National Marine Fisheries Service - Alaska Region, ATT: James W. Balsiger
Alaska Region National Marine Fisheries Service, ATT: Brad Smith
U.S. NMFS NOAA – Office of Protected Species, ATT: Michael Payne
U.S. Army Corps of Engineers Regulatory Branch Alaska District, ATT: Chief Kevin Morgan
U.S. Environmental Protection Agency Region X Alaska, ATT: Diane Soderland
U.S. Coast Guard Alaska Region, ATT: U.S. Coast Guard Commander
U.S. Coast Guard Alaska Region, ATT: COMMANDING OFFICER MARINE SAFETY OFFICE
U.S. National Park Service, ATT: Glen Yankus
Mayor of Northwest Arctic Borough
Mayor of North Slope Borough
North Slope Borough Planning Department, ATT: Dan Forrester
North Slope Borough Dept of Wildlife Management, ATT: Taqulik Hepa
North Slope Borough Dept of Wildlife Management, ATT: Robert Suydam
North Slope Borough, ATT: Andrew Mack
North Slope Borough, ATT: Tom Lohman
Mayor of Kaktovik
Mayor of Nuiqsut
Mayor of Barrow
Mayor of Wainwright
Native Village of Wainwright
Mayor of Point Hope
Native Village of Point Hope
Native Village of Point Lay
Native Village of Kotzebue
Inupiat Community of the Arctic Slope
Alaska Eskimo Whaling Commission, ATT Harry Brower
Alaska Eskimo Whaling Commission, ATT: Janice Meadows
Alaska Beluga Whale Committee
Alaska Nanuuq Commission
Alaska Ice Seal Committee
Eskimo Walrus Commission
Earthjustice, ATT: Erik Grafe
Alaska Wilderness League, ATT: David Dickson

Center for Biological Diversity, ATT: Rebecca Noblin
Audubon Alaska, ATT: Stanley E. Senner
Defenders of Wildlife, ATT: Richard Charter
Natural Resource Defense Council, ATT: Charles M. Clusen
Northern Alaska Environmental Center, Pamela A. Miller
Ocean Conservancy, Andrew Hartsig
Pacific Oceana, ATT: Jim Ayers
Pacific Environment, ATT: Whit Sheard
Sierra Club, Trish Rolfe
The Wilderness Society, ATT: Eleanor Huffines
World Wildlife Fund, ATT: Layla Hughes