Ms. Susan Childs
Shell Exploration and Production
3601 C Street, Suite 1000
Anchorage, Alaska 99503-5948

Dear Ms. Childs:

The Bureau of Ocean Energy Management Alaska Region (BOEM AKR) has reviewed the Shell Gulf of Mexico Inc.'s (Shell) notice to conduct 2013 ancillary activities in the Chukchi Sea, titled Shell 2013 Open Water Survey Program, Chukchi Sea, Alaska (dated April 19, 2013). The notice describes various ancillary activities as defined in 30 CFR 550.105 and 30 CFR 550.207; these ancillary activities include the on-lease shallow hazard, site clearance, and ice gouge surveys.

Our review indicates that the ancillary activities described in the notice comply with the performance standards under 30 CFR 550.202(a), (b), (d), and (e). Accordingly, BOEM has no objection to Shell proceeding with the ancillary activities. Shell is reminded that its ancillary activities must comply with applicable lease stipulations and the terms of its incidental take authorizations from the National Marine Fisheries Service (NMFS) and the U.S. Fish & Wildlife Service (USFWS). BOEM also expects Shell’s ancillary activities to comply with the terms and conditions developed through BOEM’s Endangered Species Act, Section 7 consultations with NMFS and USFWS. A summary of the reasonable and prudent measures, and terms and conditions from the most recent Biological Opinions are provided in Enclosure A as guidance only.

Shell is responsible for notifying other agencies that may be affected by the ancillary activities.

If you have questions, please contact Bill Ingersoll, BOEM AKR Chief of the Plans Section at 907-334-5224, 907-306-4381 or via email at william.ingersoll@boem.gov.

Sincerely,

David Johnston, Regional Supervisor
Office of Leasing and Plans

Enclosure A: Biological Opinion Specifications

cc: Mayor of Northwest Arctic Borough
    Mayor of North Slope Borough
North Slope Borough Planning Department
North Slope Borough Department of Wildlife Management
City of Wainwright
Native Village of Point Hope
Native Village of Point Lay (IRA)
Native Village of Kotzebue
City of Point Hope
City of Barrow
Village of Barrow
Inupiat Community of the Arctic Slope
Alaska Department of Natural Resources, Office of Project Management
Bureau of Safety Environmental and Enforcement, Alaska Region, Regional Director
Bureau of Safety Environmental and Enforcement, Chief, Environmental Enforcement Division
U.S. Fish and Wildlife Service Region 7 Regional Director
U.S. Environmental Protection Agency, Region 10
U.S. Coast Guard, Alaska
Alaska Eskimo Whaling Commission
Alaska Eskimo Walrus Commission
Alaska Ice Seal Committee
Alaska Beluga Whale Committee
Alaska Nanuuq Commission
Enclosure A: Biological Opinion Specifications

This enclosure provides a summary of obligations developed through BOEM’s ESA, Section 7 consultations with NMFS and USFWS. This summary is provided as guidance only, and does not alter or supersede existing obligations and requirements established in applicable lease stipulations, IHAs, LOAs, and/or BO/ITSs. Please refer any compliance questions to Bill Ingersoll, BOEM AKR Chief of the Plans Section, at 907-334-5224, 907-306-4381 or via email at william.ingersoll@boem.gov.

Oil and Gas Leasing and Exploration Activities in the U.S. Beaufort and Chukchi Seas, Alaska, Endangered Species Act (ESA) Section 7(a)(2) Biological Opinion, NMFS Consultation Number: F/AKR/2011/0647 [dated April 2, 2013] (NMFS BO/ITS)

1. In accordance with NMFS BO/ITS RPM 1-1 [Authorizations]: Shell is to provide BOEM AKR RS/LP copies of 2013 MMPA authorizations, specifically the NMFS IHA and USFWS LOA.

2. In accordance with NMFS BO/ITS RPM 1-2 [Operations]: Shell is to perform all operations described in its April 19, 2013 notice to conduct ancillary activities in compliance with the NFMS IHA attained by Shell for the specific ancillary activities.

3. In accordance with NMFS BO/ITS RPM 2-1 [Takes]: Shell is to report any take of marine mammals in a manner other than that described in the NMFS BO/ITS within 12 hours to:

<table>
<thead>
<tr>
<th>Contact</th>
<th>Phone Number</th>
<th>Email</th>
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<tbody>
<tr>
<td>NMFS AKR Protected</td>
<td>907-586-7235</td>
<td>N/A</td>
</tr>
<tr>
<td>Resources Division</td>
<td></td>
<td></td>
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4. In accordance with NMFS BO/ITS RPM 3-1 [Sound Source Verification testing]: before conducting ancillary activities using airguns, Shell is to conduct Sound Source Verification (SSV) test(s) to verify the radii of the exclusion and monitoring zones within real-time conditions in the field. When moving an operation into a new area (i.e. moved activities to a location where Shell has not yet measured those sound sources if that new location has different depth, bathymetry, or other characteristics from the previously measured location), Shell is to verify the new radii of the exclusion zones.

5. In accordance with NMFS BO/ITS RPM 3-2 [Calibration of airgun array]: Shell is to adhere to the IHA requirements and provide documentation of compliance to the BOEM RS/LP or a designee.

6. In accordance with NMFS BO/ITS RPM 3-3 [180 and 190 db exclusion radii]: Shell is to adhere to the IHA requirements and provide documentation of compliance to the BOEM RS/LP or a designee.

7. In accordance with NMFS BO/ITS RPM 3-4 [Plans]:
   a) Shell is to adhere to the IHA requirements and provide documentation of compliance to the BOEM RS/LP or a designee.
   b) Shell is to adhere to the mitigation and monitoring plans to protect ESA-listed bowhead, fin, humpback whales, and ringed and bearded seals and be consistent with NMFS’ terms and conditions.

8. In accordance with NMFS BO/ITS RPM 3-5 [Reporting]:
   a) Shell is to report the taking of any marine mammal in a manner other than that authorized within the lessee’s valid IHA and/or ITS within 12 hours to:
b) In the event that the specified activity causes a take of a marine mammal that results in a serious injury or mortality (e.g., ship-strike, gear interaction, and/or entanglement), or is otherwise not authorized by any MMPA permit issued for the activity, Shell is to immediately cease the specified activities and report the incident within 12 hours to:

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<td>907-586-7235</td>
<td>N/A</td>
</tr>
<tr>
<td>BOEM AKR Chief Plans Section</td>
<td>907-334-5224 or 907-306-4381</td>
<td><a href="mailto:william.ingersoll@boem.gov">william.ingersoll@boem.gov</a></td>
</tr>
<tr>
<td>BSEE EED</td>
<td>907-334-5314 or 907-306-0562</td>
<td><a href="mailto:donald.donley@bsee.gov">donald.donley@bsee.gov</a></td>
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9. In accordance with NMFS BO/ITS RPM 4-1 [Requirements]: Shell is to adhere to the IHA requirements and the conditions within Section 1.3.4 of the NMFS BO/ITS.

10. In accordance with NMFS BO/ITS RPM 4-2 [Reporting]: when a threatened or endangered marine mammal is sighted, Shell is to provide:

   a) The species, group size, age/size/sex categories (if determinable), behavior, heading (if consistent), bearing and distance from seismic vessel, sighting cue, apparent reaction to the airgun or vessel (e.g., none, avoidance, approach, paralleling, etc., and including responses to ramp-up); and

   b) The time, location, heading, speed, activity of the vessel (including number of airguns operating and whether in state of ramp-up or power-down), Beaufort Wind Force Scale sea state, ice cover, visibility, and sun glare.

*Biological Opinion and Conference Opinion for Oil and Gas Activities in the Beaufort and Chukchi Sea Planning Areas on Polar Bears (Ursus maritimus), Polar Bear Critical Habitat, Spectacled Eiders (Somateria fischeri), Spectacled Eider Critical Habitat, Steller’s Eiders (Polysticta stelleri), Kittlitz’s Murrelets (Brachyramphus brevirostris), and Yellow-billed Loons (Gavia adamsii) [dated May 8, 2012] (USFWS BO/ITS)*

1. In accordance with USFWS BO/ITS T&C 1 [Lighting and Avian Collisions] and as applicable for these activities, Shell is to:

   a) Adhere to Shell’s project specific LOA requirements and provide documentation of compliance to the BOEM RS/LP or a designee.
b) Minimize the use of high-intensity work lights on vessels, especially within the 20-m bathymetric contour. Use exterior lights only as necessary to illuminate active, on-deck work areas during periods of darkness or inclement weather; otherwise, turn off lights. Interior and navigation lights should remain on as needed for safety.

c) Report avian collisions within three days* via established reporting methods to:

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<tr>
<td>USFWS, Fairbanks Fish &amp; Wildlife Field Office, Endangered Species Branch</td>
<td>907-456-0441</td>
<td>N/A</td>
</tr>
<tr>
<td>BOEM Plans Section</td>
<td>907-334-5228</td>
<td><a href="mailto:albert.csaszar@boem.gov">albert.csaszar@boem.gov</a></td>
</tr>
<tr>
<td>BSEE EED</td>
<td>907-334-5314 or 907-306-0562</td>
<td><a href="mailto:donald.donley@bsee.gov">donald.donley@bsee.gov</a></td>
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*Report all collisions of endangered avian species within 12 hours.

d) Report the following avian collision data: date, time, location of vessel in decimal degrees (format: Latitude XX.XXXX, Longitude XXX.XXXX), species (to the lowest taxonomic level), weather (Beaufort Wind Force Scale sea state, ice cover, visibility, and sun glare), general weather (past 24 hours), photographs (if possible), vessel operational status, vessel lighting effects, and comments on behavior, injury or fate (ie indications that the lighting may have attracted the bird to the vessel).

2. In accordance with USFWS BO/ITS T&C 2 (Aircraft) and as applicable for these activities:
   a) Shell is to adhere to the LOA requirements and provide documentation of compliance to the BOEM RS/LP or a designee.
   b) Shell is to implement mitigation measures requiring that aircraft not fly below 1,500 ft. over the Ledyard Bay Critical Habitat Unit (LBCHU) between July 1 and November 15.
   c) Shell is to report low-level flights over LBCHU associated with a medical or other emergency within 24 hours to:

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