



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
Silver Spring, MD 20910

JUN 18 2009

Dr. Bill Streever  
Environmental Studies Leader  
BP Exploration (Alaska), Inc.  
P.O. Box 196612  
Anchorage, Alaska 99519-6612

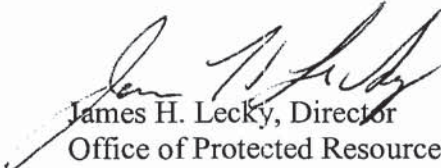
Dear Dr. Streever:

Enclosed is a Letter of Authorization (LOA) issued to BP Exploration (Alaska), Inc. (BP), under the Authority of Section 101(a)(5)(A) of the Marine Mammal Protection Act (MMPA) (16 U.S.C. 1361 *et seq.*), and the regulations governing the incidental take of marine mammals during oil and gas production at the Northstar facility in the Beaufort Sea, Alaska. This authorization covers the taking of marine mammals incidental to all activities at the Northstar facility, subject to the terms and conditions of the LOA. This LOA is valid from July 7, 2009 through July 6, 2010.

You should note that BP and its employees and contractors are required to comply with the conditions contained in this Authorization. In addition, BP must cooperate with any Federal, state, or local agency monitoring the impacts of its activities and submit reports within the time periods required in the LOA. A report on the 2009 monitoring period must be submitted to the Office of Protected Resources, National Marine Fisheries Service (NMFS) by June 1, 2010, or the date of the annual open-water peer-review meeting, whichever is earlier.

If you have any questions concerning the Authorization or its requirements, please contact Candace Nachman, Office of Protected Resources, NMFS, at (301) 713-2289 or Brad Smith, Western Alaska Field Office, NMFS, at (907) 271-3023.

Sincerely,

  
James H. Lecky, Director  
Office of Protected Resources

Enclosure



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## Letter of Authorization

BP Exploration (Alaska) Inc., 900 East Benson Boulevard, Anchorage, Alaska, is hereby authorized under section 101(a)(5)(A) of the Marine Mammal Protection Act (16 U.S.C. 1371(a)(5)(A)), 50 CFR 216.106, and 50 CFR 216.208 to take small numbers of marine mammals incidental to the production of oil and gas at the Northstar facility and the maintenance of that facility in the Central Beaufort Sea, Alaska. This includes the annual construction of ice roads, the operation of vehicular traffic on and off those ice roads, the operation of hovercraft either on-ice or on open water, annual ice-breaking activities, the operation of two diesel generators (designated emergency generators), three gas-turbine generators for the power plant operating at 50-percent duty cycle (i.e., up to two will be operating at any-one time), two high pressure gas-turbine compressors, one low-pressure flare, and two high-pressure flares and barge, vessel, and helicopter traffic to support oil production and facility maintenance, contingent upon the following conditions:

1. This Authorization is valid from July 7, 2009, through July 6, 2010.

2. (a). Taking by Level B harassment is authorized for the following marine mammal species: bowhead whales (*Balaena mysticetus*), gray whales (*Eschrichtius robustus*), beluga whales (*Delphinapterus leucas*), ringed seals (*Phoca hispida*), spotted seals (*Phoca largha*), and bearded seals (*Erignathus barbatus*).

(b). Taking by Level A harassment or mortality is authorized for the following marine mammal species: up to five ringed seals (*Phoca hispida*).

3. The holder of this Authorization is required to cooperate with the National Marine Fisheries Service (NMFS) and any other Federal, state or local agency monitoring the impacts of the activity on marine mammals. The holder must notify Mr. Brad Smith, at the Western Alaska Field Office, NMFS, (907)-271-3023, within 48 hours of starting of ice road construction, cessation of ice-road usage, and the commencement of ice-breaking activities for the Northstar facility.

4. Prohibitions.

(a). The taking of any kind of any other species of marine mammals beyond those mentioned in 2(a) and (b) above is prohibited and may result in the modification, suspension or revocation of this Authorization.

(b). The taking by Level A harassment, serious injury (i.e., injury that is likely to lead to mortality) or death of any species of marine mammals, other than the specified number of ringed seals in condition 2(b) above, incidental to activities related to

oil production (excluding oil spills) is prohibited and may result in the modification, suspension or revocation of this Authorization.

(c). The taking by harassment (including injury) or death of any species of marine mammals incidental to an oil spill is prohibited and may result in the modification, suspension or revocation of this Authorization.

(d). For the purposes of this Authorization, an "oil spill" is any significant discharge (as discharge is defined in 33 U.S.C. 2701(7)) of liquid hydrocarbons (including crude oil and diesel fuel) into the waters of the Beaufort Sea, irrespective of cause, including Acts of God, that: (i) causes oil to be present in the water; and (ii) is determinable, within three years of discharge, (a) to significantly adversely affect bowhead whales or other species harvested for subsistence use and (b) is followed by a significant reduction in the availability of these species for subsistence use in the area(s) in which they are normally hunted.

(e). The taking of any marine mammal in a manner prohibited under this Authorization must be reported within 48 hours of the taking to Mr. Brad Smith at the Western Alaska Field Office, NMFS, Telephone (907) 271-3023 and Ms. Candace Nachman, Office of Protected Resources, NMFS, Telephone (301) 713-2289 ext. 156.

(f). The taking of bowhead whales incidental to conducting ice-breaking activities, by an ice-breaking vessel, prior to the conclusion of the North Slope Borough's cessation of the fall bowhead whaling season is prohibited, unless in agreement with a signed Conflict Avoidance Agreement.

5. In order for NMFS to determine whether the Holder of this Authorization is in compliance with condition 4(c) of this Authorization, in the event of a significant discharge of oil, an independent expert must be mutually selected by the Holder of this Authorization and the North Slope Borough. Determinations made by this expert in accordance with the terms and conditions of the Good Neighbor Policy signed on September 19, 2001, must be provided to the Director, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, Maryland 20910 (Telephone 301-713-2332).

## 6. Mitigation.

### (a). Ice-Covered Season.

(i). In order to reduce the taking of ringed seals to the lowest level practicable, the Holder of this Authorization must begin winter construction activities, principally ice roads, as soon as possible once weather and ice conditions permit such activity.

(ii). Any ice-roads or other construction activities that are initiated after March 1, in previously undisturbed areas in waters deeper than 3 m (MLT)(10 ft),

must be surveyed, using trained dogs, in order to identify and avoid ringed seal structures by a minimum of 150 m (492 ft).

(iii). After March 1 of each year, activities should avoid, to the greatest extent practicable, disturbance of any located seal structure.

(b). Open-Water Season.

(i). The Holder of this Authorization will establish and monitor, during all daylight hours, a 190 dB re 1  $\mu$ Pa (rms) safety zone for seals around the island for all activities with sound pressure levels (SPLs) that are expected to exceed that level in waters beyond the Northstar facility on Seal Island. Establishing the safety zone will require analysis of sound attenuation data collected previously in the waters of the Northstar facility.

(ii). The Holder of this Authorization will establish and monitor, during all daylight hours, a 180 dB re 1  $\mu$ Pa (rms) safety zone for whales around the island for all activities with SPLs that are expected to exceed that level in waters beyond the Northstar facility at Seal Island. Establishing the safety zone will require analysis of sound attenuation data collected previously in the waters of the Northstar facility.

(iii). If any marine mammals are observed within the relevant safety zone, described in conditions 6(b)(i) and 6(b)(ii), the activity creating the noise will shut-down or reduce its SPL sufficiently to ensure that received SPLs do not exceed those prescribed SPL intensities at the affected marine mammal. This SPL will be maintained until such time as the observed marine mammal(s) has been seen to have left the safety zone or until 15 minutes have elapsed without resighting, whichever occurs sooner.

(iv). The entire safety zones prescribed in conditions 6(b)(i) and 6(b)(ii) must be visible during the entire 30-minute pre-activity monitoring time period in order for the activity to begin.

(c). All non-essential boats, barge, and air traffic will be scheduled to avoid periods when bowhead whales are migrating through the area where they may be affected by noise from these activities.

(d). In order to reduce the potential for taking marine mammals in a manner prohibited under condition 4 of this Authorization, new drilling into oil-bearing strata shall not take place during either open water or spring-time broken ice conditions.

(e). Helicopter flights to support Northstar activities must be limited to a corridor from Seal Island to the mainland, and, except when limited by weather, must maintain a minimum altitude of 1,000 ft (305 m), except during takeoff and landing.

(f). All work must be performed in a manner consistent with any signed Conflict Avoidance Agreement with the affected Native Alaskan communities.

#### 7. On-Ice Monitoring.

The Holder of this Authorization will ensure that the winter monitoring program includes the following monitoring tasks:

(a)(i). After March 1, trained dogs must be used to detect seal lairs in previously undisturbed areas that may be potentially affected by on-ice construction activity, if any. Surveys for seal structures should be conducted to a minimum distance of 150 m (492 ft) from the outer edges of any disturbance.

(ii). If ice-road construction occurs after March 1, 2010, conduct a follow-up assessment in May, 2010, of the fate of all seal structures located during monitoring conducted under condition 7(a)(i), near the physically disturbed areas.

(iii). Monitoring under conditions 7(a)(i) or 7(a)(ii) must be conducted by a qualified biological researcher approved in advance by the Regional Administrator, Alaska Region, NMFS.

(b). The Holder of this Authorization will conduct acoustic measurements to document sound levels, characteristics, and transmissions of airborne sounds with expected source levels of 90 dBA or greater created by on-ice activity at Northstar that have not been measured in previous years. In addition, the Holder of this Authorization will conduct acoustic measurements to document sound levels, characteristics, and transmissions of airborne sounds for sources on Northstar Island with expected received levels at the water's edge that exceed 90 dBA that have not been measured in previous years. These data will be collected in order to assist in the development of future monitoring and mitigation measures.

(c). The Holder of this Authorization will not significantly modify any portion of its approved Monitoring Plan without prior approval from NMFS.

#### 8. Open Water Monitoring.

The following monitoring will be conducted:

(a). The Holder of this Authorization will continue to conduct a combination of acoustic measurements of sounds produced by oil-production-related activities through boat-based hydrophones and/or sonobuoys deployed by vessel, hydrophones connected by cable to recording equipment on the island, and/or autonomous sea floor acoustic recorders. Directional Autonomous Seafloor Recorders (DASARS) will be deployed in the manner described at the 2006 Anchorage, AK, open-water peer-review meeting.

(b). In a manner consistent with recommendations made at the 2006 Anchorage, AK, open-water peer-review meeting, the Holder of this Authorization will monitor the bowhead whale migration past Northstar by acoustic localization methods (primarily DASARS) to document the relative numbers of bowhead calls vs. distance offshore in the southern part of the bowhead migration corridor seaward of the Northstar facility.

(c). During each major type of activity that has the potential to result in SPLs greater than 180 dB (re 1  $\mu$ Pa (rms)) in waters beyond Seal Island, marine mammal observers will conduct observations for 8 hours/day for 2-3 days, and during quiet periods before and/or after these activities occur. Observers must conduct observations a minimum of 30 minutes prior to starting activities that may result in SPLs greater than 180 dB (re 1  $\mu$ Pa (rms)) exceeding the perimeter of the island's land/water interface.

(d). All biological observers must be provided with appropriate reticulated binoculars and night-vision equipment in order to monitor marine mammal numbers and behavior within the 180 dB (re 1  $\mu$ Pa (rms)) isopleth from the Northstar facility.

(e). Biological observers will record the: (i) species and numbers of marine mammals seen within the 180 dB (re 1  $\mu$ Pa (rms)) zone; (ii) bearing and distance of the mammal(s) from the observation point; and (iii) behavior of marine mammal(s), and any indication of disturbance reactions to the monitored activity.

(f). The Holder of this Authorization will not significantly modify any portion of its Monitoring Plan without prior approval from NMFS.

## 9. Reporting.

(a). The Holder of this Authorization will provide a draft annual report on activities and marine mammal monitoring at Northstar to NMFS. The reporting period for this Authorization will run from November 1, 2008 through October 31, 2009. A report on the 2008-2009 monitoring period must be submitted by June 1, 2010, or the date of the annual open-water peer-review meeting, whichever is earlier.

(b). The draft annual report will include:

(i). A summary of BP's activities at Northstar, including: dates and locations of ice-road construction; on-ice activities; vessel/hovercraft operations; oil spills; emergency training; and major repair or maintenance activities that might alter the ambient sounds in a way that might have detectable effects on marine mammals, principally bowhead whales.

(ii). The estimated number of marine mammals (by species) that were detected within the relevant designated safety zone described under condition 6(b) of this Authorization;

(iii). The results of any sound measurements of noise produced by operational activities at the Northstar facility; and

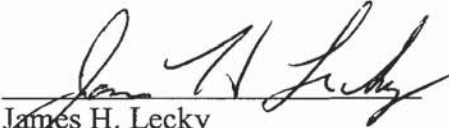
(iv). The results of the acoustic monitoring of bowhead whale vocalizations at the Northstar facility, as required by condition 8(e).

(c). Before acceptance by NMFS as a final monitoring report under this Authorization, the report will be subject to review and modification by NMFS scientists.

(d). The draft report will be considered the final report for this activity under this Authorization if NMFS has not provided comments and recommendations within 90 days of receipt of the draft report.

10. Activities related to the monitoring described in this Authorization do not require a separate scientific research permit issued under section 104 of the Marine Mammal Protection Act.

11. A copy of this Authorization must be in the possession of the operator of each vessel, aircraft and marine mammal monitors operating under the authority of this Authorization.

  
James H. Lecky  
Director  
Office of Protected Resources  
National Marine Fisheries Service

JUN 18 2009

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Date