



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

JAN 13 2014

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 January 13, 2014, through January 14, 2019, the date of expiration of the current regulations.

You should note that BP and its employees and contractors are required to comply with the conditions contained in this Authorization. An annual report is due to NMFS, Office of Protected Resources, by June 1 each year. The annual reports will cover the time period of November 1 through October 31. Additionally, a comprehensive report on the marine mammal monitoring and research conducted under the regulations must be submitted to the Office of Protected Resources, NMFS, 240 days before expiration of the regulations.

If you have any questions concerning the Authorization or its requirements, please contact Candace Nachman, Office of Protected Resources, NMFS, at (301) 427-8429.

Sincerely,

Donna S. Wieting, Director
Office of Protected Resources

Enclosure



Letter of Authorization

BP Exploration (Alaska) Inc. (BP), 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 217.148 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 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 January 13, 2014, through January 14, 2019.
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*). See Table 1 (attached) for numbers of authorized take.

(b). Taking by Level A harassment, serious injury, or mortality is authorized for the following marine mammal species: up to five ringed seals annually.

3. The holder of this Authorization is required to notify Mr. Brad Smith, at the Western Alaska Field Office, NMFS, (907) 271-3023, within 48 hours of starting 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) 427-8429.

(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 301-427-8401).

6. Mitigation.

(a). Ice-Covered Season.

(i). In order to reduce the taking of ringed seals to the lowest level practicable, BP 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 or a comparable method, in order to identify and avoid

ringed seal structures by a minimum of 150 m (492 ft). Using trained dogs is the preferred method, but if they are not available or practicable, the use of a comparable method is appropriate.

(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). BP will establish and monitor, during all daylight hours, a 190 dB re 1 μ Pa (rms) exclusion 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 exclusion zone will require analysis of sound attenuation data collected previously in the waters of the Northstar facility.

(ii). BP will establish and monitor, during all daylight hours, a 180 dB re 1 μ Pa (rms) exclusion 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 exclusion 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 exclusion zone, described in conditions 6(b)(i) and 6(b)(ii), the activity creating the noise will shut-down or reduce its SPL sufficiently (i.e., power down) 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 exclusion zone or until 15 minutes have elapsed in the case of a pinniped or odontocete or 30 minutes in the case of a mysticete without resighting, whichever occurs sooner.

(iv). The entire exclusion 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). BP shall employ a ramp-up technique at the beginning of each day's in-water pile driving activities and if pile driving resumes after it has ceased for more than one hour.

(i). If a vibratory driver is used, BP is required to initiate sound from vibratory hammers for 15 seconds at reduced energy followed by a 1-minute waiting period. The procedure shall be repeated two additional times before full energy may be achieved.

(ii). If a non-diesel impact hammer is used, BP is required to provide an initial set of strikes from the impact hammer at reduced energy, followed by a 1-minute waiting period, then two subsequent sets.

(iii). If a diesel impact hammer is used, BP is required to turn on the sound attenuation device for 15 seconds prior to initiating pile driving.

(d). 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.

(e). 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.

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

(g). 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.

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

(i). After March 1, trained dogs, or a comparable method, 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 in a given year, conduct a follow-up assessment in May of that year, 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). BP 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, BP 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.

(c). BP 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). BP will continue to conduct a combination of acoustic measurements of sounds produced by oil-production-related activities and acoustic monitoring of the bowhead whale migration past Northstar.

(b). During each major type of activity that has the potential to result in SPLs greater than 180 and 190 dB (re 1 μ 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 or 190 dB (re 1 μ Pa (rms)) exceeding the perimeter of the island's land/water interface and for 30 minutes after the cessation of the activity.

(c). 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 and 190 dB (re 1 μ Pa (rms)) isopleths from the Northstar facility.

(d). Biological observers will record the: (i) species and numbers of marine mammals seen within the 180 or 190 dB (re 1 μ Pa (rms)) zones; (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.

(e). BP will not significantly modify any portion of its Monitoring Plan without prior approval from NMFS.

9. Reporting.

(a). BP will provide a draft annual report on activities and marine mammal monitoring at Northstar to NMFS by June 1 of each year. The annual reporting period will run from November 1 through October 31 of each year.

(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 exclusion 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(a).

(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.

(e). If specific mitigation and monitoring are required for activities on the sea ice initiated after March 1 (requiring searches for seal lairs), during the operation of strong sound sources (requiring visual observations and shutdown procedures), or for the use of new sound sources that have not previously been measured, then a preliminary summary of the activity, method of monitoring, and preliminary results shall be submitted to NMFS within 90 days after the cessation of that activity. The complete description of methods, results, and discussion shall be submitted as part of the annual report described in condition 9(b).

(f). A comprehensive report on all marine mammal monitoring and research conducted during the effective period of these regulations shall be submitted to the Director, Office of Protected Resources, 1315 East West Highway, Silver Spring, Maryland, 20910, 240 days prior to expiration of the regulations or 240 days after the expiration of the regulations if renewal of the regulations will not be requested.

(g). Before acceptance by NMFS as a final comprehensive report, the report will be subject to review and modification by NMFS scientists.

10. (a). In the unanticipated event that Northstar operations clearly causes the death of more than five ringed seals annually or the take of a marine mammal in a manner prohibited by this Authorization, such as an injury (Level A harassment), serious injury or mortality (e.g., ship-strike, gear interaction), BP shall immediately take steps to cease the operations that caused the unauthorized take and report the incident as soon as practicable and no later than 24 hours after the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, or his designee (telephone: 301-427-8429 or Candace.Nachman@noaa.gov), the Alaska Regional Office (telephone: 907-271-3023 or Brad.Smith@noaa.gov), and the Alaska Regional Stranding Coordinators (telephone: 907-586-7248 or Aleria.Jensen@noaa.gov or Barbara.Mahoney@noaa.gov). The report must include the following information:

- (i) Time, date, and location (latitude/longitude) of the incident;
- (ii) The type of equipment involved in the incident;

(iii) Description of the incident;
 (iv) Water depth, if relevant;
 (v) Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, and visibility);
 (vi) Species identification or description of the animal(s) involved;
 (vii) The fate of the animal(s); and
 (viii) Photographs or video footage of the animal (if equipment is available).

(b). Activities shall not resume until NMFS is able to review the circumstances causing the exceedance of the authorized take. NMFS will work with BP to identify additional measures to minimize the likelihood that more than five ringed seals will not be killed each year (or other marine mammal species that may have been injured, seriously injured, or killed) from BP's activities. BP may not resume their activities until notified by NMFS via letter, email, or telephone.

(c). In the event that BP discovers an injured or dead marine mammal, and it is determined that the cause of the injury or death is unknown and the death is relatively recent (i.e., in less than a moderate state of decomposition as described in the next paragraph), BP will report the incident/discovery as soon as practicable and no later than 24 hours after the incident/discovery to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, by phone or email, the Alaska Regional Office, and the NMFS Alaska Stranding Hotline and/or by email to the Alaska Regional Stranding Coordinators (see contact information in condition 10(a)). The report must include the same information identified in condition 10(a). Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with BP to determine whether modifications in the activities are appropriate.

(d). In the event that BP discovers an injured or dead marine mammal, and it is determined that the injury or death is not associated with or related to the activities authorized in this final rule (e.g., previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), BP shall report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, by phone or email and the NMFS Alaska Stranding Hotline and/or by email to the Alaska Regional Stranding Coordinators (see contact information in condition 10(a)), as soon as practicable and no later than 24 hours after the discovery. BP shall provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. Activities may continue while NMFS reviews the circumstances of the incident.

11. 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.

12. In the unlikely event of an oil spill, BP shall comply with NOAA's Marine Mammal Oil Spill Response Guidelines, to the extent practicable.

13. BP is required to comply with the Terms and Conditions of the Incidental Take Statement (ITS) corresponding to NMFS's Biological Opinion issued to NMFS's Office of Protected Resources.

14. A copy of this Authorization and the ITS must be in the possession of anyone operating under the authority of this Authorization.

15. Penalties and Permit Sanctions: Any person who violates any provision of this Authorization is subject to civil and criminal penalties, permit sanctions, and forfeiture as authorized under the MMPA.

16. This Authorization may be modified, suspended or withdrawn if the Holder fails to abide by the conditions prescribed herein or if the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals, or if there is an unmitigable adverse impact on the availability of such species or stocks for subsistence uses.



Donna S. Wieting
Director
Office of Protected Resources
National Marine Fisheries Service

JAN 13 2014

Date

Attachment

Attachment**Table 1. Authorized take numbers, by species**

Species	Total Annual Authorized Level B Take	Total Annual Authorized Injury or Mortality Take
Ringed Seal	31	5
Bearded Seal	5	0
Spotted Seal	5	0
Bowhead Whale	15	0
Beluga Whale	20	0
Gray Whale	2	0