



United States Department of the Interior



U.S. FISH AND WILDLIFE SERVICE
1011 East Tudor Road
Anchorage, Alaska 99503-6199

IN REPLY REFER TO:
AFES/MMM

JUL 28 2015

Joe Ramirez
Department of Capital Improvement Project Management
North Slope Borough
P.O. Box 1050
Barrow, Alaska 99723

Dear Mr. Ramirez:

Thank you for submitting a request for a Letter of Authorization (LOA) for take by harassment of polar bears in association with the North Slope Borough (NSB) 2016 gas pipeline upgrade project. The project will add cathodic corrosion protection to 5.6 miles of existing gas pipeline. Upgrades are scheduled for the winter of 2015-2016. In accordance with sections 101(a)(4)(A), 109(h), and 112(c) of the Marine Mammal Protection Act of 1972, as amended, enclosed are LOA 15-12 and 15-INT-15 authorizing NSB to take small numbers of polar bears by Level B non-lethal harassment under the specified terms and conditions. If changes develop during the period approved under this LOA, including changes in proposed activities, locations, or methods, the U.S. Fish and Wildlife Service must be notified prior to project continuation.

If you have any questions, please contact Mr. Michael Hendrick or Mr. Christopher Putnam of our Marine Mammals Management Office, at (907) 786-3479 or (907) 786-3844 or by email at micheal_hendrick@fws.gov or chrsitopher_putnam@fws.gov, respectively.

Sincerely,

Chief, Marine Mammals Management

Enclosure

Email cc: Guy Wade, Michael Baker International
Mr. Richard Shideler, Alaska Department of Fish and Game
U.S. Fish and Wildlife Service, Fairbanks Fish and Wildlife Field Office
U.S. Fish and Wildlife Service, Office of Law Enforcement
North Slope Borough, Department of Law



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1011 East Tudor Road
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LETTER OF AUTHORIZATION Incidental Take (15-12)

ISSUED: July 28, 2015
EXPIRES: July 27, 2016

In accordance with Incidental Take Regulations listed at 76 FR 47010, dated August 3, 2011, the North Slope Borough (NSB) is authorized to take small numbers of polar bears incidental to activities associated with the winter 2015-2016 gas pipeline upgrade project.

Cathodic corrosion protection will be added to approximately 5.6 miles of existing gas pipeline between the South Field Gas Handling Facility and the Barrow Utilities and Electric Cooperative facility during the ice-covered 2015-2016 season. A chain trencher will be used to excavate a trench parallel to the existing pipeline, in which an anode cable will be buried. Access to the pipeline corridor will be by construction of an ice-road. This Letter of Authorization (LOA) covers all activities in direct support of the pipeline upgrade work. A detailed description of the proposed activities is provided in NSB's *North Slope Borough Gas Pipeline Cathodic Protection System Project Description* (received June 30, 2015).

The U.S. Fish and Wildlife Service (Service) seeks to limit disturbance of polar bear maternal dens and denning habitat. Activities will be conducted during the polar bear maternal denning period (November to mid-April). No infrared den surveys are proposed given the project's proximity to the community of Barrow. Close proximity may reduce the likelihood of denning, but does not eliminate the possibility that bears may den in the project area. All personnel must use caution when operating near polar bear denning habitat during the maternal denning period. Service Marine Mammals Management Office (MMM) biologists are available at the phone numbers listed below if questions or concerns arise.

This LOA and the required conditions below apply to all NSB employees, contractors, and personnel performing NSB-approved work for the project described above. This LOA stipulates the following conditions:

1. This LOA authorizes incidental take only.
2. NSB must comply with all requirements listed at 76 FR 47010, dated August 3, 2011, and 50 CFR §18.128.
3. Project operations managers, or designees, must understand, be fully aware of, and be capable of implementing the conditions of this LOA.
4. Project field camps and personnel shall limit encounters with polar bears by being observant of approaching bears (e.g., the use of polar bear guards) and by allowing bears to pass unhindered when possible.
5. If changes develop in the project during the period approved under this LOA, such as activities, location, or methods, the Service Marine Mammals Management Office (MMM) must be notified prior to the implementation of such changes.
6. NSB must satisfy the following mitigation, monitoring, cooperation, and reporting requirements:
 - (a) Mitigation:
 - (i) Holders of a LOA must conduct activities in a manner that minimizes to the greatest extent practicable adverse impacts of military, mining, transportation, and oil and gas industry activities (Industry) on polar bears, their habitat, and on the availability of polar bears for subsistence uses. Dynamic, adaptive management approaches such as temporal or spatial limitations (work shutdown, postponement, or work site relocation) must be used to avoid or minimize interactions with polar bears and subsistence users. Avoiding and minimizing interaction is particularly important when polar bears are engaged in sensitive activities (such as denning and feeding).
 - (ii) Holders of this LOA must have an approved polar bear interaction plan on file with the Service and at work sites. The *North Slope Borough Gas Pipeline Cathodic Protection System Polar Bear Interaction Plan (May 5, 2015)* fulfills this requirement and is incorporated by reference into this LOA. All provisions must be conducted as described in the plan unless specifically noted otherwise in this LOA.
 - (iii) Holders of a LOA must make efforts to limit disturbance around known or suspected polar bear dens during the denning season (November–April).
 - (A) Potential polar bear denning habitat must be considered when conducting activities in the coastal areas. A map of potential coastal polar bear denning habitat can be found at:
http://alaska.usgs.gov/science/biology/polar_bears/products.html.
 - (B) Holders of a LOA seeking to carry out activities in known or suspected polar bear denning habitat must make efforts to locate occupied polar bear dens within and near proposed areas of operation, utilizing appropriate tools, such as consultation with knowledgeable local residents, agency personnel, community polar bear patrol personnel, evaluation of available historic denning documentation, and/or searches

by polar bear scent-trained dogs. All observed or suspected polar bear dens must be reported to the Service prior to the initiation of activities.

- (C) Holders of a LOA must observe a 1.6-km (1-mi) operational exclusion zone around all known or suspected polar bear dens during the denning season (November–April, or until the female and cubs leave the areas). Should previously unknown occupied dens be discovered within 1.6 km (1 mi) of activities, work must cease and the Service contacted for guidance. The Service will evaluate these instances on a case-by-case basis to determine the appropriate action. Potential actions may range from cessation or modification of work to conducting additional monitoring, and the holder of the LOA must comply with any additional measures specified.
 - (D) Holders of a LOA must restrict the timing of their activity to limit disturbance around dens.
- (iv) Holders of a LOA must conduct their activities in a manner that, to the greatest extent practicable, minimizes adverse impacts on the availability of polar bears for subsistence uses.
- (A) NSB must contact affected subsistence communities to discuss potential conflicts caused by location, timing, and methods of proposed operations, and submit to the Service a record of communication that documents these discussions.
 - (B) Ice roads and vehicle transit routes shall be selected to minimize any potential conflict with active or anticipated polar bear subsistence hunting activity as determined through community consultations.
- (b) Monitoring:
- (i) Polar bear awareness training must be provided to all onsite personnel. A description of the training provided shall be submitted to the Service.
 - (ii) One or more trained and qualified individual(s) shall observe, record, and report on the presence of polar bears at the work site and on effects of Industry activities on polar bears.
 - (iii) One or more trained, Service-approved individual(s) shall be designated to lead onsite polar bear monitoring programs and to conduct adaptive mitigation responses.
 - (iv) NSB must develop and implement a site specific, Service-approved, marine mammal monitoring and mitigation plan to and evaluate the effects of authorized activities on polar bears and subsistence use. The plan must enumerate the number of polar bears encountered, estimate the number of incidental takes that occurred, and evaluate the effectiveness of prescribed mitigation measures used during specified activities. The *Polar Bear Interaction Plan* cited in part 6(a)(i) of this LOA, together with the reporting documents listed in part (d) below will satisfy this requirement.

(c) Cooperation:

- (i) Holders of a LOA must cooperate with the Service and other designated Federal, State, and local agencies to monitor the impacts of Industry on polar bears. Where insufficient information exists to evaluate the potential effects of proposed activities on polar bears and the subsistence use of this resource, holders of a LOA may be required to participate in joint monitoring and/or research efforts to address these information needs and insure the least practicable impact to these resources. Information needs include, but are not limited to:
 - (A) Distribution, abundance, and habitat use patterns of polar bears; and
 - (B) Cumulative effects of multiple simultaneous operations on polar bears.

(d) Reporting:

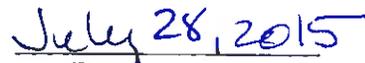
- (i) Observation reports: NSB shall report all polar bear sightings, signs of polar bears (e.g., tracks or excavations), and any potential dens to the Service MMM using the polar bear observation report within 24 hours via email to fw7_mmm_reports@fws.gov. Information within the observation report will include, but is not limited to:
 - (A) Date, time, and location of observation;
 - (B) Number of bears, and their sex and age (if known);
 - (C) Observer name and contact information;
 - (D) Weather, visibility, and ice conditions at the time of observation;
 - (E) Estimated closest point of approach for bears from personnel and facilities;
 - (F) Industry activity at time of sighting, possible attractants present;
 - (G) Bear behavior; and
 - (H) Description of the bear's reaction to Industry activities.
- (ii) Incident reports: NSB shall report any incident in which the presence of one or more polar bears causes any action to be taken by onsite personnel. Reports should include all information specified under the observation report, as well as a full written description of the encounter and actions taken by the operator. Examples of incidents could include: work shutdown or delays; withdraw of personnel to a safe place; or property damage caused by a bear. The operator must report:
 - (A) Type of encounter;
 - (B) Duration of the encounter;
 - (C) Actions taken; and
 - (D) Any incidental take of a polar bear.
- (iii) Final report: NSB must submit a report to the Service MMM within 90 days after completion of activities. The final report must include, at a minimum, the following information:
 - (A) A summary of project-related activities, including dates and locations;

- (B) A summary of polar bear monitoring conducted including methods, dates, times, and total hours;
 - (C) A summary of dates and locations of polar bears observed;
 - (D) Analysis of the distribution, abundance, and behavior of polar bear sightings in relation to date, location, ice conditions and worksite operational state; and
 - (E) Analysis of factors affecting the visibility and detectability of polar bears during specified monitoring activities;
 - (F) A summary of polar bear activities or responses to Industry activities; including an estimated level of take:
 - (G) A summary of all mitigation conducted due to presence of polar bears; and
 - (H) Any other activities conducted under this LOA for which a separate report was not submitted. This may include descriptions of trainings, summaries of communications with subsistence users, findings of joint research projects, and incidental sightings of grizzly (brown bears) or walruses.
 - (I) Final reports may incorporate daily polar bear watch logs.
7. If a polar bear interaction escalates into a life threatening situation, to save the life of a person in immediate danger, section 101(c) of the MMPA allows, without specific authorization, the take (including lethal take) of a polar bear. Any injury or lethal take of a polar bear must be reported to the Service immediately (within 24 hours).

The Service has completed intra-Service consultation under the Endangered Species Act of 1973, as amended (ESA), and has determined that the issuance this LOA is not likely to jeopardize the continuing existence of polar bears. No additional authorization under the ESA is required. If you have any questions, please contact Mr. Michael Hendrick or Mr. Christopher Putnam at (907) 786-3479 or (907) 786-3844, respectively.



Chief, Marine Mammals Management



Date



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AFES/MMM

United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE
1011 East Tudor Road
Anchorage, Alaska 99503-6199



LETTER OF AUTHORIZATION Intentional Take (15-INT-15)

ISSUED: July 28, 2015
EXPIRES: July 27, 2016

In accordance with sections 101(a)(4)(A), 109(h), and 112(c) of the Marine Mammal Protection Act of 1972 as amended (MMPA), the North Slope Borough (NSB) is authorized to take by Level B non-lethal harassment (deterrence), small numbers of polar bears while conducting work for the winter 2015-2016 gas pipeline upgrade project.

Cathodic corrosion protection will be added to approximately 5.6 miles of existing gas pipeline between the South Field Gas Handling Facility and the Barrow Utilities and Electric Cooperative facility during the ice-covered 2015-2016 season. A chain trencher will be used to excavate a trench parallel to the existing pipeline, in which an anode cable will be buried. Access to the pipeline corridor will be by construction of an ice-road. This Letter of Authorization (LOA) covers all activities occurring in direct support of the pipeline upgrade work as described in NSB's *North Slope Borough Gas Pipeline Cathodic Protection System Project Description* (received June 30, 2015). All provisions contained in this document and in the *North Slope Borough Gas Pipeline Cathodic Protection System Polar Bear Interaction Plan* (dated May 5, 2015) are incorporated by reference into this LOA. Changes to the project that occur without notification to the Service may invalidate this LOA.

Section 101(a)(4)(A) of the MMPA states that, "Except as provided in subparagraphs (B) and (C), the provisions of this chapter [prohibiting take] shall not apply to the use of measures:

- i. by the owner of fishing gear or catch, or an employee or agent of such owner, to deter a marine mammal from damaging the gear or catch;
- ii. by the owner of other private property, or an agent, bailee, or employee of such owner, to deter a marine mammal from damaging private property;
- iii. by any person, to deter a marine mammal from endangering personal safety; or
- iv. by a government employee, to deter a marine mammal from damaging public property, so long as such measures do not result in the death or serious injury of a marine mammal."

Section 109(h)(1) states that, “nothing in this title [Conservation and Protection of Marine Mammals]... shall prevent a Federal, State, or local government official or employee or a person designated under section 112(c) from taking, in the course of his or her duties as an official, employee, or designee, a marine mammal in a humane manner (including euthanasia) if such taking is for: A) the protection or welfare of the mammal; B) the protection of the public health and welfare; or C) the non-lethal removal of nuisance animals.”

Section 112(c) allows for the transfer of Federal authority, “...as may be necessary to carry out the purposes of this title [Conservation and Protection of Marine Mammals]... and on such terms as he [the Secretary] deems appropriate with any Federal or State agency, public or private institution, or other person.”

The purpose of authorizing take by Level B non-lethal harassment, or deterrence, is to maintain human safety in polar bear habitat and reduce the likelihood of a polar bear death or injury. The primary objectives are to:

1. Prevent bears from associating food with humans and facilities;
2. Condition bears to avoid people;
3. Allow bears to use travel routes (natural and human made) to move along the coast; and
4. Prevent bears from extended use of areas around facilities.

This LOA is subject to the following conditions:

1. All provisions for polar bear interactions described within the *North Slope Borough Gas Pipeline Cathodic Protection System Polar Bear Interaction Plan (May 5, 2015)* will be conducted as described unless otherwise noted in this LOA. This document is approved and all provisions are incorporated into this LOA by reference. A copy of the interaction plan must be available on site for all personnel.
2. Project operations managers, or designees, must understand, be fully aware of, and be capable of implementing the conditions of this LOA.
3. This LOA is issued specifically to NSB, who is responsible for ensuring only trained and qualified personnel are assigned the task of harassing (detering) polar bears.
4. Prior to initiation of activities, a list of trained personnel responsible for deterrence and a description of the training received shall be submitted to the Service.
5. NSB is responsible for ensuring that personnel operating under this authorization meet all Federal and State laws and regulations regarding the use and carry of firearms.
6. NSB, or its designated agent, is responsible for documenting and reporting to the Service, Marine Mammals Management Office (MMM), via the phone numbers listed below or by email to fw7_mmm_reports@fws.gov, all instances involving harassment (deterrence) activities no later than 24 hours after the occurrence.

7. Project personnel shall limit encounters with polar bears by being observant of approaching bears (e.g., using polar bear guards) and by allowing bears to pass unhindered when possible.
8. Prior to conducting a harassment activity, operators must:
 - a. Make a reasonable effort to reduce or eliminate attractants;
 - b. Secure the site, notify supervisor, and move personnel to safety;
 - c. Ensure the bear has escape route(s); and
 - d. Ensure communication with all personnel.
9. Harassment or deterrence techniques must not cause injury or death of a bear. Appropriate harassment or deterrence techniques may include, but are not limited to:
 - a. Bear monitors;
 - b. Air horns;
 - c. Electric fences;
 - d. Chemical repellents;
 - e. Acoustic recordings;
 - f. Vehicles; and
 - g. Projectiles, such as, cracker shells, bean bags, rubber bullets, and screamers.
10. When conducting a harassment activity, operators must:
 - a. Understand that the safety and welfare of the bear is second only to the safety and welfare of humans in a deterrence situation;
 - b. Chose the method that will have the least effect on the bear and increase the intensity of the method or use additional methods only if necessary;
 - c. Shout at the bear before using projectiles or other methods (avoidance conditioning); and
 - d. Move bear in proper direction; continue with minimally necessary deterrents to receive desired result.
11. After a harassment event has occurred, operators must:
 - a. Monitor bear's movement (to ensure no return);
 - b. Notify supervisor and personnel when it is safe to resume work; and
 - c. Fill out report to be sent to the Service as required above (within 24 hours).
12. A final report of all encounters and harassment or deterrence events will be submitted to the Service, MMM no later than 90 days from the expiration date of this authorization.
13. If a polar bear interaction escalates into a life threatening situation, to save the life of a person in immediate danger, section 101(c) of the MMPA allows, without specific authorization, the take (including lethal take) of a polar bear. Any injury or lethal take of a polar bear must be reported to the Service immediately (within 24 hours).

The Service has completed intra-Service consultation under the Endangered Species Act of 1973, as amended (ESA) and has determined that the issuance this LOA is not likely to jeopardize the continuing existence of polar bears. No additional authorization under the ESA is required. If

you have any questions, please contact Mr. Michael Hendrick or Mr. Christopher Putnam at (907) 786-3479 or (907) 786-3844, respectively.



Chief, Marine Mammals Management

July 28, 2015
Date