



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

DEC 29 2015

Ms. Suzan Simonds
Permits and Regulatory Manager
SAExploration
8240 Sandlewood Place, Suite 102
Anchorage, Alaska 99507

Dear Ms. Simonds:

The U.S. Fish and Wildlife Service (Service) has reviewed your request, dated August 17, 2015, for a Letter of Authorization (LOA) for the incidental take of polar bears during activities associated with SAExploration, Inc. (SAE) 2015-2016 Aklaq 3D winter seismic survey on the North Slope of Alaska.

In accordance with Service regulations 50 CFR 18 subpart J published on August 3, 2011 (76 FR 47010) please find enclosed LOA 15-18 authorizing the incidental take of small numbers of polar bears during oil and gas activities in association with SAE's 2015-2016 Aklaq 3D winter seismic survey on the North Slope of Alaska. A detailed description of the proposed activities is provided in the SAE *Aklaq 3D 2016/2017 Program Plan of Operations Winter Seismic Survey* (August 17, 2015).

Should you have any further questions regarding your LOA, or polar bear management in general, please contact Mr. Michael Hendrick or the Marine Mammals Management Office, at (907) 786-3479 or (907) 786-3800, or email at michael_hendrick@fws.gov.

Sincerely,


Acting Chief, Marine Mammals Management

Enclosures

Email cc: 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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LETTER OF AUTHORIZATION Incidental Take (15-18)

ISSUED: December 15, 2015
EXPIRES: May 31, 2016

In accordance with Incidental Take Regulations at 50 CFR 18 subpart J published on August 3, 2011 (76 FR 47010), SAExploration, Inc. (SAE) is authorized to take small numbers of polar bears (*Ursus maritimus*) incidental to activities associated with the 2015-2016 Aklaq 3D winter seismic survey on the North Slope of Alaska.

The SAE proposes to conduct the 2015-2016 Aklaq 3D winter seismic survey from December through May. The SAE proposes to conduct a 3D winter seismic survey on land and in near-shore areas between the Canning River and the Sagavanirktok River on the North Slope of Alaska. The proposed survey area encompasses approximately 1512 square miles and will include parts or all of the following townships: U0010N016E through U0010NO24E; U009N016E through U009NO24E; U008N017E through U008NO24E; U007N015E through U007NO23E; U006N015E through U006NO23E; U005N015E through U005NO23E. A detailed description and map of the proposed activities is provided in the SAE *Aklaq 3D 2016/2017 Program Plan of Operations Winter Seismic Survey* (August 17, 2015).

As a condition of this LOA, SAE shall conduct a polar bear den detection survey prior to the start of project activities near polar bear denning habitat during the maternal denning period (November to mid-April). The Service seeks to limit disturbance of polar bear maternal dens and denning habitat. 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 SAE employees, contractors, and personnel performing SAE-approved work for the project described above. This LOA stipulates the following conditions:

- 1) This LOA authorizes incidental take only.
- 2) The SAE must comply with all requirements listed at 50 CFR subpart J published on August 3, 2011(76 FR 47010).

- 3) The SAE 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.
- 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) Project operations managers, or designees, must understand, be fully aware of, and be capable of implementing the conditions of this LOA.
- 6) If changes develop in the project during the period approved under this LOA, such as activities, location, or methods, the Service MMM must be notified prior to the implementation of such changes.
- 7) SAE must conduct the following mitigation, monitoring, and reporting.
 - (a) Mitigation: Holders of a LOA must use methods and conduct activities in a manner that minimizes to the greatest extent practicable adverse impacts on polar bears, their habitat, and on the availability of these marine mammals for subsistence uses. Dynamic management approaches, such as temporal or spatial limitations in response to the presence of marine mammals in a particular place or time or the occurrence of marine mammals engaged in a particularly sensitive activity (such as feeding), must be used to avoid or minimize interactions with polar bears and subsistence users.

1) All applicants:

- i. Holders of a LOA must cooperate with the Service and other Federal, State, and local agencies to monitor the impacts of oil and gas industry (Industry) activities on polar bears.
- ii. Holders of a LOA must designate a qualified individual or individuals to observe, record, and report on the effects of Industry activities on polar bears.
- iii. Holders of a LOA must have an approved polar interaction plan on file with the Service and at work sites and polar bear awareness training must be provided to personnel. The SAE *Akmaq 3D 2016/2017 Program Plan of Operations Winter Seismic Survey Appendix C Field Operating Procedure* (August 17, 2015) and all associated addenda are incorporated by reference into this LOA. All provisions must be complied with unless specifically noted otherwise in this LOA.
- iv. Holders of a LOA 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.
- v. If deemed appropriate by the Service, holders of a LOA will be required to hire and train polar bear monitors to alert crew of the presence of polar bears and initiate adaptive mitigation responses.

2) Onshore activities:

- i. Holders of a LOA must make efforts to limit disturbance around known polar bear dens.

- ii. Holders of a LOA seeking to carry out onshore exploration activities in known or suspected polar bear denning habitat during the denning season (November–April) must make efforts to locate occupied polar bear dens within and near proposed areas of operation, utilizing appropriate tools, such as, forward-looking infrared (FLIR) imagery and/or polar bear scent-trained dogs. All observed or suspected polar bear dens must be reported to the Service prior to the initiation of activities.
- iii. Holders of a LOA must observe a 1.6 km (1 mi) operational exclusion zone around all known 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.
- iv. A map of potential coastal polar bear denning habitat can be found at: http://alaska.usgs.gov/science/biology/polar_bears/products.html. This measure ensures that the location of potential polar bear dens is considered when conducting activities in the coastal areas of the Beaufort Sea.
- v. Holders of a LOA must restrict the timing of their activity to limit disturbance around dens.

3) Operating conditions for aircraft:

- i. Operators of support aircraft should, at all times, conduct their activities at the maximum distance possible from polar bears.
 - ii. Under no circumstances, other than an emergency, should aircraft operate at an altitude lower than 457 m (1,500 ft) within 805 m (0.5 mi) of polar bears observed on ice or land. Helicopters may not hover or circle above such areas or within 805 m (0.5 mile) of such areas. When weather conditions do not allow a 457 m (1,500 ft) flying altitude, such as during severe storms or when cloud cover is low, aircraft may be operated below the 457 m (1,500 ft) altitude stipulated above. However, when aircraft are operated at altitudes below 457 m (1,500 ft) because of weather conditions, the operator must avoid areas of known polar bear location and should take precautions to avoid flying directly over or within 805 m (0.5 mile) of these areas.
 - iii. Plan all aircraft routes to minimize any potential conflict with active or anticipated polar bear subsistence hunting activity as determined through community consultations.
- 4) Holders of a LOA must conduct their activities in a manner that, to the greatest extent practicable, minimizes adverse impacts on the availability polar bears for subsistence uses.

- (b) Monitoring: Depending on the location, timing, and nature of proposed activities, holders of a LOA will be required to do the following:
- i. Maintain trained, Service-approved, onsite observers to carry out monitoring programs for polar bears necessary for initiating adaptive mitigation responses. Polar bear monitors: Polar bear monitors will be required under the monitoring plan if polar bears are known to frequent the area or known polar bear dens are present in the area. Monitors will act as an early detection system for polar bear activity near Industry activity.
 - 2) Develop and implement a site specific, Service-approved, marine mammal monitoring and mitigation plan to monitor and evaluate the effects of authorized activities on polar bears, and the subsistence use of this resource. The marine mammal monitoring and mitigation plan must enumerate the number of polar bears encountered during specified activities, estimate the number of incidental takes that occurred during specified seismic activities, and evaluate the effectiveness of prescribed mitigation measures. The SAE Interaction Plan cited 7(a)(1)(iii) of this LOA satisfies this requirement.
 - 3) Cooperate with the Service and other designated Federal, State, and local agencies to monitor the impacts of oil and gas activities in the Beaufort Sea on polar bears. Where insufficient information exists to evaluate the potential effects of proposed activities on polar bears and the subsistence use of these resources, 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 in the Beaufort Sea include, but are not limited to:
 - i. Distribution, abundance, and habitat use patterns of polar bears in offshore environments; and
 - ii. Cumulative effects of multiple simultaneous operations on polar bears.
- (c) Reporting requirements: Holders of a LOA must report the results of specified monitoring activities to the Service MMM reporting email at fw7_mmm_reports@fws.gov.

- 1) Monitoring requirements include, but are not limited to:
 - i. Date, time, and location of observation;
 - ii. Number of bears, and their sex and age (if known);
 - iii. Observer name and contact information;
 - iv. Weather, visibility, and ice conditions at the time of observation;
 - v. Estimated closest point of approach for bears from personnel and facilities;
 - vi. Industry activity at time of sighting, possible attractants present;
 - vii. Bear behavior;
 - viii. Description of the encounter;
 - ix. Duration of the encounter; and
 - x. Actions taken.

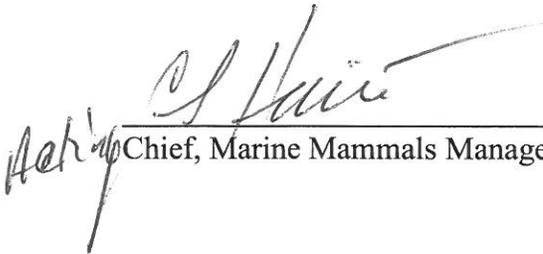
- xi. Activities along the coast of the geographic region may incorporate daily polar bear watch logs.

- 2) After-action monitoring reports: The results of monitoring efforts identified in the marine mammal monitoring and mitigation plan must be submitted to the Service for review within 90 days of completing the year's activities. Results must include, but are not limited to, the following information:
 - a. A summary of monitoring effort including: total hours, total distances, and distribution through study period;
 - b. Analysis of factors affecting the visibility and detectability of polar bears by specified monitoring;
 - c. Analysis of the distribution, abundance, and behavior of polar bear in relation to date, location, ice conditions and operational state; and
 - d. Estimates of take based on density estimates derived from monitoring and survey efforts.

If a polar bear interaction escalates into a life threatening situation, section 101 (c) of the Marine Mammal Protection Act allows, without specific authorization, the take (including lethal take) of a polar bear if such taking is necessary for self-defense or to save the life of a person in immediate danger, and such taking is reported to the Service within 48 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. This LOA is valid for the period indicated on this authorization, unless extended or terminated in writing by the Service, MMM.

If you have any further questions, please contact Mr. Michael Hendrick or the Marine Mammals Management Office at (907) 786-3479 or (907) 786-3800 or email at michael_hendrick@fws.gov.



Chief, Marine Mammals Management

12.29.15
Date