



United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE

1011 East Tudor Road

Anchorage, Alaska 99503-6199



IN REPLY REFER TO:

JAN 29 2015

AFES/MMM

Mr. William G. Britt, Jr.
Environment Manager
Hilcorp Alaska, LLC
3800 Centerpoint Drive, Suite 1400
Anchorage, Alaska 99503

Dear Mr. Britt:

We have received your request, dated November 25, 2014, for Letters of Authorizations (LOAs) for the incidental take of polar bears and Pacific walrus and the intentional take of polar bears in regards to the Hilcorp Alaska, LLC (Hilcorp) 2015 Liberty Development Geotechnical and Shallow Hazard Survey on the North Slope of Alaska.

In response, and in accordance with regulations listed at 76 FR 47010, dated August 3, 2011, enclosed is LOA 15-08 authorizing Hilcorp to take small numbers of polar bears and Pacific walrus incidental to oil and gas exploration activities in association with the 2015 Liberty Development Geotechnical and Shallow Hazard Survey on the North Slope of Alaska. In addition, Intentional Take Authorization LOA 15-INT-05, as authorized under sections 101(a)(4)(A), 109(h), and 112(c) of the Marine Mammal Protection Act (MMPA), is also enclosed.

Hilcorp proposes to conduct a geotechnical investigation, shallow hazard sonar survey and strudel scour survey with a transition zone component on state lands, and in federal and state waters of Foggy Island Bay in the Beaufort Sea during the winter, spring break-up and open water seasons of 2015. A detailed description of the proposed activities is provided in Hilcorp's *Request for Letter of Authorization (LOA) for the Incidental Take of Polar Bears and Pacific Walrus, Intentional Take of Polar Bears by Harassment; Liberty Development Geotechnical and Shallow Hazard Survey, North Slope, Alaska dated November 25, 2014*.

All provisions contained within Hilcorp's *ATTACHMENT V, Polar Bear and Walrus Interaction and Mitigation Plan* are incorporated by reference into this LOA. Hilcorp field camps and personnel shall limit encounters of polar bears by being observant of approaching animals (i.e., the use of polar bear guards) and where practicable, by allowing the animals to pass unhindered. Hilcorp must also: 1) Provide copies of the polar bear observation form to all contractors operating under the LOA; 2) report any walrus or polar bear sightings, or signs of polar bears,

such as tracks or excavations, to our office using the polar bear observation report; and, 3) report any possible den locations that are found during work activities immediately to our office. Service biologists are available for consultation if questions or concerns arise during the project period at the phone number listed below and noted in your interaction plan.

If a polar bear interaction escalates into a life threatening situation, section 101(c) of the MMPA allows, without specific authorization, the take (including lethal take) of a polar bear if such taking is imminently necessary for self-defense or to save the life of a person in immediate danger, and such taking is reported to the Service within 24 hours.

Polar bear conservation has benefited from monitoring programs associated with the Incidental Take Program since 1993. Monitoring serves to assess the effect of industrial activities on polar bears by evaluating trends and effects of bear encounter rates, take frequency, as well as the location and timing of encounters. Additionally, through monitoring, the Service seeks to limit disturbance to maternal polar bear den sites, both known dens and those areas that could be preferred by denning polar bears. Hilcorp must use caution when operating near these areas during the maternal denning period (mid-November to mid-April). A polar bear den detection survey will be required in areas of potential denning habitat where Hilcorp proposes to operate.

The U.S. Geological Survey has posted information regarding polar bear denning habitat on the Alaska Science Center (ASC) website. The den habitat map (ARC/INFO export file), the mapping manuscript (PDF file), and a picture of den habitat (JPG file) are available on the ASC website: <http://www.absc.usgs.gov/dataproducts.htm>. Use these resources when planning activities in potential denning areas.

If any changes develop during the project, such as activities or location, the Service must be notified prior to the planned operation. This will allow us to evaluate the activity and, if appropriate, amend the appropriate LOA(s).

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

If you have any further questions, please contact Mr. Christopher Putnam of our Marine Mammals Management Office at (907) 786-3844.

Sincerely,

Chief, Marine Mammals Management

Enclosures

Mr. William G. Britt, Jr.

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cc: Mr. Richard Shideler, Alaska Department of Fish and Game (Email)
U.S. Fish and Wildlife Service, Fairbanks Fish and Wildlife Field Office (Email)
U.S. Fish and Wildlife Service, Office of Law Enforcement (Email)
North Slope Borough, Department of Law (Email)



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AFES/MMM

JAN 29 2015

LETTER OF AUTHORIZATION Incidental Take (15-08)

ISSUED: February 1, 2015
EXPIRES: February 1, 2016

Hilcorp Alaska, LLC (Hilcorp) is hereby authorized to take small numbers of polar bears (*Ursus maritimus*) and Pacific walrus (*Odobenus rosmarus divergens*) incidental to activities occurring during the 2015 Liberty Development Geotechnical and Shallow Hazard Survey on the North Slope of Alaska.

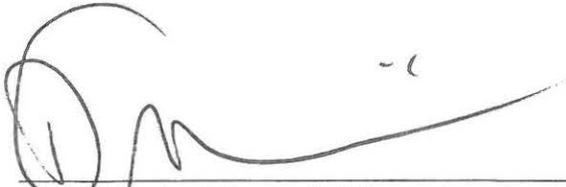
Hilcorp proposes to conduct a geotechnical investigation, shallow hazard sonar survey and strudel scour survey with a transition zone component on state lands, and in federal and state waters of Foggy Island Bay in the Beaufort Sea during the winter, spring break-up and open water seasons of 2015. A detailed description of the proposed activities is provided in Hilcorp's *Request for Letter of Authorization (LOA) for the Incidental Take of Polar Bears and Pacific Walrus, Intentional Take of Polar Bears by Harassment; Liberty Development Geotechnical and Shallow Hazard Survey, North Slope, Alaska dated November 25, 2014.*

This Letter of Authorization (LOA) and the required conditions below apply to all Hilcorp employees, contractors and personnel performing Hilcorp-approved work under the scope of operations to be conducted. This authorization is subject to the following conditions.

1. Only incidental take is authorized under this LOA.
2. Hilcorp's *ATTACHMENT V, Polar Bear and Walrus Interaction and Mitigation Plan* is approved and all provisions must be complied with unless specifically noted otherwise in this LOA.
3. A copy of this LOA and the approved interaction plan listed above must be posted and available for all personnel and in the possession of the operators of all vessels and aircraft engaging in the activities approved under the authority of this LOA.
4. Hilcorp Operations Managers, or designates, must be fully aware, understand, and be capable of implementing the conditions of this LOA.

5. At the discretion of the U.S. Fish and Wildlife service (Service), Hilcorp must allow the Service to place an observer on site, including any facilities, vessels, aircraft, or vehicles, to monitor the impacts of the activity on marine mammals, when requested.
6. Monitoring, mitigation, and reporting activities will be conducted in accordance with 50 CFR § 18.128 and must comply with the following requirements:
 - Hilcorp must cooperate with the Service, and other designated Federal, State, or local agencies to monitor the impacts of oil and gas exploration activities on polar bears and walrus.
 - If any changes develop in the project during the period approved under this LOA, such as activities, location, or methods, Hilcorp must notify the Service, Marine Mammals Management Office (MMM) prior to the implementation of such changes.
 - A polar bear den detection survey will be required each year in the areas of potential denning habitat where Hilcorp proposes to operate. Hilcorp completed a den detection survey in December, 2014.
 - Hilcorp must not conduct activities that operate nor pass within one mile (1.6 kilometers) of known polar bear dens, and all observed dens must be reported to the Service, MMM within 12 hours of discovery. If occupied dens are identified within one mile of activities, work within the immediate area will cease and the Service must be 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. Hilcorp must comply with any additional measures specified.
 - Operators of support aircraft should, at all times, conduct their activities at the maximum distance possible from concentrations of walrus or polar bears.
 - Under no circumstances, other than an emergency, should fixed wing aircraft operate at an altitude lower than 457 m (1,500 feet [ft]) within 805 m (0.5 mi) of walrus groups observed on ice, or within 1,610 m (1 mi) of walrus groups observed on land. Under no circumstances, other than an emergency, should rotary winged aircraft (helicopters) operate at an altitude lower than 914 m (3,000 ft) within 1,610 m (1 mi) of walrus groups observed on land. 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 mi) 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 required altitudes 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 walrus and polar bear concentrations and should take precautions to avoid flying directly over or within 805 m (0.5 mi) of these areas.

- Hilcorp must designate a qualified individual or individuals to observe, record, and report the effects of the activity on polar bears and walruses to the Service within 24 hours of visual observation.
- Hilcorp must submit an annual monitoring report to the Service, MMM as required under 50 CFR § 18.128, which will be received no later than 90 days after the expiration date of the LOA.



Chief, Marine Mammals Management

11/29/15

Date



IN REPLY REFER TO:

United States Department of the Interior

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



AFES/MMM

JAN 29 2016

LETTER OF AUTHORIZATION Intentional Take (15-INT-05)

ISSUED: February 1, 2015
EXPIRES: February 1, 2016

Hilcorp Alaska, LLC (Hilcorp) is hereby authorized to intentionally take by Level B non-lethal harassment, or deterrence, small numbers of polar bears (*Ursus maritimus*) associated with activities occurring during the 2015 Liberty Development Geotechnical and Shallow Hazard Survey on the North Slope of Alaska in accordance with sections 101(a)(4)(A), 109(h) and 112(c) of the Marine Mammal Protection Act of 1972 (MMPA), as amended.

Hilcorp proposes to conduct a geotechnical investigation, shallow hazard sonar survey and strudel scour survey with a transition zone component on state lands, and in federal and state waters of Foggy Island Bay in the Beaufort Sea during the winter, spring break-up and open water seasons of 2015. A detailed description of the proposed activities is provided in Hilcorp's *Request for Letter of Authorization (LOA) for the Incidental Take of Polar Bears and Pacific Walrus, Intentional Take of Polar Bears by Harassment; Liberty Development Geotechnical and Shallow Hazard Survey, North Slope, Alaska dated November 25, 2014*.

Section 101(a)(4)(A) of the MMPA states that, "Except as provided in subparagraphs (B) and (C), the provisions of this chapter 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 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 deems appropriate with any Federal or State agency, public or private institution, or other person.”

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.”

The purpose of authorizing taking by Level B non-lethal harassment, or deterrence, is to maintain human and bear safety and welfare in polar bear habitat. Authorizing Level B harassment take reduces the likelihood of death or injury of polar bears. This is accomplished by the following objectives:

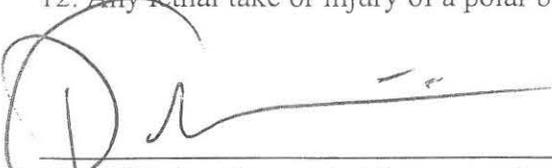
- Prevent bears from associating food with humans and facilities.
- “Teach” bears to avoid people.
- Allow bears to use travel routes (natural and human made) to move along the coast.
- Prevent bears from extended use of areas around facilities.

This Letter of Authorization (LOA) is subject to the following conditions:

1. This LOA is restricted to Level B non-lethal harassment or deterrent activities.
2. Hilcorp’s *ATTACHMENT V, Polar Bear and Walrus Interaction and Mitigation Plan* is approved and all provisions must be complied with unless specifically noted otherwise in this LOA. A copy of this interaction plan must be available on site for all personnel.
3. Hilcorp operations managers, or designates, must be fully aware, understand, and be capable of implementing the conditions of this authorization.
4. This LOA is issued specifically to Hilcorp who is responsible for ensuring **trained and qualified** personnel are assigned the task to harass (deter) polar bears. A list of trained personnel responsible for deterrence will be on file prior to initiation of activities with the Service Incidental Take Coordinator.
5. Hilcorp is solely responsible for ensuring that personnel operating under this authorization meet all Federal and State laws and regulations regarding the use and carry of firearms should firearms be used for bear deterrence.

6. Hilcorp, or its designated agent, is responsible for documenting and reporting to the U.S. Fish and Wildlife Service (Service), Marine Mammals Management Office (MMM) all instances involving harassment activities as soon as possible and no later than 24 hours after the occurrence.
7. Harassment or deterrence techniques must not cause injury or death of a bear. Types of harassment or deterrence techniques may include, but are not limited to:
 - Bear monitors.
 - Air horns.
 - Electric fences.
 - Chemical repellents.
 - Acoustic recordings.
 - Vehicles.
 - Projectiles, such as, cracker shells, bean bags, rubber bullets, and screamers.
8. Prior to conducting a harassment activity, operators must:
 - Make a reasonable effort to reduce or eliminate attractants.
 - Secure site, notify supervisor and move personnel to safety.
 - Ensure bear has escape route(s).
 - Ensure communication with all personnel.
9. When conducting a harassment activity, operators must:
 - Keep in mind that the safety and welfare of the bear is second only to the safety and welfare of humans in a harassment or deterrence situation.
 - Choose 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.
 - Shout at the bear before using projectiles or other methods.
 - Move bear in proper direction; continue with minimally necessary deterrents to receive desired result.
10. After a harassment event has occurred, operators must:
 - Monitor bears movement (to ensure no return).
 - Notify supervisor and personnel when it is safe to resume work.
 - Fill out report to be sent to the Service as required above (within 24 hours).
11. A final report of all encounters and harassment or deterrence events will be submitted to the Service, MMM no later than 60 days from the expiration date of this authorization.

12. Any lethal take or injury of a polar bear must be reported to the Service immediately.



Chief, Marine Mammals Management

1/29/15

Date