United States Department of the Interior

FISH AND WILDLIFE SERVICE
1011 E. Tudor Road
Anchorage, Alaska 99503-6199

IN REPLY REFER TO:

AFES/MMM

JAN 11 2013

Ms. Laurette Rose
Special Projects Manager
Brooks Range Petroleum Corporation
510 L Street, Suite 601
Anchorage, Alaska 99501

Dear Ms. Rose:

We have received your request, dated November 20, 2012, for Letters of Authorization (LOAs) for the incidental take and the intentional take of polar bears during activities associated with the Brooks Range Petroleum Corporation (BRPC) Mustang Development Project.

In response, enclosed is LOA 13-03 authorizing BRPC to take small numbers of polar bears incidental to oil and gas exploration activities in association with the BRPC Mustang Development Project. In addition, Intentional Take Authorization LOA 13-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.

BRPC proposes to develop the Mustang Field located in the Southern Miluveach Unit, adjacent to the western boundary of the Kuparuk River Unit, approximately 13 miles (~21 kilometers) inland south of the Beaufort Sea coast on the North Slope of Alaska. The Mustang Field will be developed as a stand-alone process facility concept, largely independent of connections to existing North Slope processing infrastructure. Two pipeline connections, for crude sales and water supply, are planned into existing Alpine Transportation Company pipelines.

Major elements of the proposed project include:

- Gravel mine development;
- Ice and gravel road and pad construction;
- Transportation and construction of camp and facility modules, equipment and buildings;
- Pipeline construction;
- Communications tower and equipment construction;
- Injection and production wells drilling;
- Temporary drilling support facilities, vehicles and equipment

TAKE PRIDE IN AMERICA

The planned schedule for this project is:

- First quarter of 2013: development of gravel mine, begin construction of ice and gravel pads and roads;
- Second quarter of 2013: gravel conditioning in preparation for main pad construction;
- Third quarter of 2013: main production pad construction, begin installation of process and utility systems continuing through second quarter of 2014;
- First and second quarter of 2014: functional checks and commissioning operations;
- Second quarter of 2014: field start-up and first oil;
- Drilling of approximately 23 wells will begin the fourth quarter of 2013 and continue for approximately 2 years.

A detailed description of the proposed activities is found in BRPC's *Mustang Development Project, Plan of Operations, For Submittal to Alaska Department of Natural Resources (October 2012).* All provisions contained within BRPC's *Polar Bear Interaction Plan (November 2012)* are incorporated by reference into this LOA.

BRPC camps and personnel may limit encounters with 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. BRPC will also: 1) provide copies of the polar bear observation form to all contractors operating under these LOAs; 2) report any polar bear sightings, or signs of polar bears, such as tracks or diggings, to this office using the polar bear observation report; and, 3) report any possible den locations that are found during work activities immediately to our office. U.S. Fish and Wildlife Service (Service) biologists are available for consultation if questions or concerns arise during the project period at the phone numbers 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 possibly be preferred by denning polar bears. BRPC must use caution when operating near these areas during the maternal denning period (mid-November to mid-April).

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 and is not likely to destroy or adversely modify polar bear critical habitat. No additional authorization under the ESA is required.

MMPA Incidental take authorization is issued in accordance with regulations listed at 76 FR 47010, dated August 3, 2011. BRPC should pay careful attention to the monitoring and reporting requirements for each LOA. It is the responsibility of BRPC to submit required monitoring reports within the timeframes specified in each LOA. Should BRPC decide to request further take authorization beyond the expiration of these LOAs, the Service may take up to 90 days to process the request.

For your information, 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 and is not likely to destroy or adversely modify polar bear critical habitat. Issuance of these LOAs also completes ESA requirements for authorization of incidental take of the polar bear. Compliance with the terms and conditions of these LOAs insures that the LOA holder is also in compliance with the ESA. No additional authorization under the ESA is required.

If you have any further questions, please contact Mr. Craig Perham or Mr. Christopher Putnam of our Marine Mammals Management Office, at (907) 786-3810 or (907) 786-3844, respectively.

Sincerely,

Acting Chief, Marine Mammals Management

Enclosures

cc: Mr. Richard Shideler, Alaska Department of Fish and Game (email)
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

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1011 E. Tudor Road
Anchorage, Alaska 99503-6199

IN REPLY REFER TO:

AFES/MMM

U.S. Fish and Wildlife Service

LETTER OF AUTHORIZATION
(13-03)

ISSUED: January 15, 2013
EXPIRES: January 15, 2014

Brooks Range Petroleum Corporation (BRPC) is hereby authorized to take small numbers of polar bears incidental to activities occurring during the Mustang Development Project in accordance with regulations listed at 76 FR 47010, dated August 3, 2011. BRPC proposes to develop the Mustang Field located in the Southern Miluveach Unit, adjacent to the western boundary of the Kuparuk River Unit, approximately 13 miles (~21 kilometers [km]) inland south of the Beaufort Sea coast on the North Slope of Alaska. The Mustang Field will be developed as a stand-alone process facility concept, largely independent of connections to existing North Slope processing infrastructure. Two pipeline connections, for crude sales and water supply, are planned into existing Alpine Transportation Company pipelines.

Major elements of the proposed project include:

- Gravel mine development;
- Ice and gravel road and pad construction;
- Transportation and construction of camp and facility modules, equipment and buildings;
- Pipeline construction;
- Communications tower and equipment construction;
- Injection and production wells drilling;
- Temporary drilling support facilities, vehicles and equipment.

The planned schedule for this project under this authorization includes:

- First quarter of 2013: development of gravel mine, begin construction of ice and gravel pads and roads;
- Second quarter of 2013: gravel conditioning in preparation for main pad construction;

TAKE PRIDE IN AMERICA

- Third quarter of 2013: main production pad construction, begin installation of process and utility systems continuing through second quarter of 2014;
- First and second quarter of 2014: functional checks and commissioning operations;
- Drilling of approximately 23 wells will begin the fourth quarter of 2013 and continue for approximately 2 years.

A detailed description of the proposed activities is found in BRPC's *Mustang Development Project, Plan of Operations, For Submittal to Alaska Department of Natural Resources (October 2012).* All provisions contained within BRPC's *Polar Bear Interaction Plan (November 2012)* are incorporated by reference into this Letter of Authorization (LOA).

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

1. Intentional take is prohibited under this LOA.

2. BRPC's *Polar Bear Interaction Plan (November 2012),* 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 and avoidance plans listed above must be posted on site and available for all personnel engaging in the activities approved under the authority of this LOA.

4. BRPC Operations Managers, or designates, must be fully aware, understand and capable of implementing the conditions of this LOA.

5. At the discretion of the U.S. Fish and Wildlife Service (Service), BRPC 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. Polar bear monitoring, reporting, and survey activities will be conducted in accordance with 50 CFR §18.128. The basic monitoring and reporting requirements follow:

    - BRPC 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;

    - If any changes develop in the project during the period approved under this LOA, such as activities, location or methods, BRPC must notify the Service, Marine Mammals Management Office (MMM) prior to the implementation of such changes;

    - BRPC must not conduct activities that operate nor pass within one mile (1.6 km) of known polar bear dens. All observed dens must be reported to the Service, MMM within 12 hours of discovery. Should occupied dens be identified within one mile of project activities work in the immediate area will cease and the

Service, MMM must be contacted for guidance. The Service, MMM 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. BRPC must comply with any additional measures specified;

- BRPC must designate a qualified individual or individuals to observe, record, and report the effects of the activity on polar bears to the Service within 24 hours of visual observation;

- BRPC 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.

7. This Letter of Authorization is valid for the period indicated on this authorization, unless extended or terminated in writing by the U.S. Fish and Wildlife Service, Marine Mammals Management Office.

JAN 11 2013

Acting Chief, Marine Mammals Management

Date

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1011 E. Tudor Road
Anchorage, Alaska 99503-6199

IN REPLY REFER TO:

AFES/MMM

U.S. Fish and Wildlife Service

AUTHORIZATION TO TAKE, BY HARASSMENT, POLAR BEARS (13-INT-05)

ISSUED: January 15, 2013
EXPIRES: January 15, 2014

Brooks Range Petroleum Corporation (BRPC) 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 Mustang Development Project in accordance with sections 101(a)(4)(A), 109(h) and 112(c) of the Marine Mammal Protection Act of 1972 (MMPA), as amended. BRPC proposes to develop the Mustang Field located in the Southern Miluveach Unit, adjacent to the western boundary of the Kuparuk River Unit, approximately 13 miles (~21 kilometers [km]) inland south of the Beaufort Sea coast on the North Slope of Alaska. The Mustang Field will be developed as a stand-alone process facility concept, largely independent of connections to existing North Slope processing infrastructure. Two pipeline connections, for crude sales and water supply, are planned into existing Alpine Transportation Company pipelines.

Major elements of the proposed project include:

- gravel mine development;
- ice and gravel road and pad construction;
- transportation and construction of camp and facility modules, equipment and buildings;
- pipeline construction;
- communications tower and equipment construction;
- injection and production wells drilling;
- temporary drilling support facilities, vehicles and equipment.

The planned schedule for this project under this authorization includes:

- first quarter of 2013: development of gravel mine, begin construction of ice and gravel pads and roads;

TAKE PRIDE IN AMERICA

- second quarter of 2013: gravel conditioning in preparation for main pad construction;
- third quarter of 2013: main production pad construction, begin installation of process and utility systems continuing through second quarter of 2014;
- first and second quarter of 2014: functional checks and commissioning operations;
- drilling of approximately 23 wells will begin the fourth quarter of 2013 and continue for approximately 2 years.

A detailed description of the proposed activities is found in BRPC's *Mustang Development Project, Plan of Operations, For Submittal to Alaska Department of Natural Resources (October 2012).* All provisions contained within BRPC's *Polar Bear Interaction Plan (November 2012)* are incorporated by reference into this Letter of Authorization (LOA).

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:

- 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;
- 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;
- by any person, to deter a marine mammal from endangering personal safety;
- 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:

- the protection or welfare of the mammal;
- the protection of the public health and welfare;
- 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 LOA is subject to the following conditions:

1. This LOA is restricted to Level B non-lethal harassment or deterrent activities.

2. BRPC's *Polar Bear Interaction Plan (November 2012),* is approved and all provisions must be complied with unless specifically noted otherwise in this LOA.

3. BRPC 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 BRPC 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. BRPC is solely responsible for ensuring that personnel operating under this authorization meet all Federal and State of Alaska laws and regulations regarding the use and carry of firearms should firearms be used for bear deterrence.

6. BRPC, or its designated agent, is responsible for documenting and reporting to the U.S. Fish and Wildlife Service (Service), Marine Mammals Management Office (MMM), at (907) 786-3800, 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;
   - 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;
   - shout at the bear before using projectiles or other methods (avoidance conditioning);
   - move the bear in proper direction; continue with minimally necessary deterrents to receive desired result.

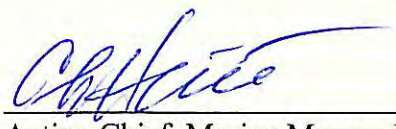
10. After a harassment event has occurred, operators must:

    - 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.

13. This Letter of Authorization is valid for the period indicated on this authorization, unless extended or terminated in writing by U.S. Fish and Wildlife Service, Marine Mammals Management Office.



Acting Chief, Marine Mammals Management

JAN 11 2013

Date