



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

1011 E. Tudor Rd.

Anchorage, Alaska 99503-6199

IN REPLY REFER TO:

AFES/MMM

**MAR 8 2007**

Ms. Susan Childs  
Shell Exploration & Production Company  
3601 C Street, Suite 1334  
Anchorage, Alaska 99503

Dear Ms. Childs:

This responds to your December 27, 2006 request for Letters of Authorization (LOA) for incidental and intentional take of polar bears in regards to the Shell Offshore, Inc. (Shell) 2007 Beaufort Sea On-ice R & D Seismic Program.

Enclosed is a LOA (07-04) that would allow Shell to take small numbers of polar bears incidental to oil and gas industry exploration activities identified in your LOA request. The proposed start date for this project is March 2007. Shell plans to conduct an on-ice marine geophysical (seismic) research and development (R & D) program on Outer Continental Shelf (OCS) lease blocks located offshore from Oliktok Point, Milne Point, West Dock, or Endeavor Island in the Alaskan Beaufort Sea. This on-ice seismic R & D will consist of 35 linear miles of surveying within a 16 square kilometer area. All provisions contained within Shell's polar bear interaction plan are incorporated by reference into this LOA.

Due to their importance as polar bear denning habitat, the larger tundra-covered barrier islands, such as Pingok, Bodfish, and Cottle islands in the Jones island group, are areas where the Service prefers to minimize disturbance to possible denning bears. Currently, there are at least up to five known polar bear dens in this area. Increased monitoring and mitigation measures and options to minimize the impact of industrial activities have been implemented for this area, including one-mile exclusion zones around each known den (see enclosed map; Figure 1).

Historical polar bear denning activity reveals that polar bear denning habitat occurs along coastal bluff and tundra island cutbanks. Disturbance during denning could lead to abandonment of dens and possible mortality to cubs. Seismic vibroseis activities occurring in these areas near preferred denning habitat may encounter denning polar bears. The U.S. Fish and Wildlife Service (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. With this in mind, use caution when operating near these areas during the maternal denning period (mid November to mid April). In addition, to further limit disturbance to the dens in the Jones Island group vicinity, the Service requests that the placement of Shell's seismic camp remain outside of the lagoon exclusion zone depicted in Figure 2; that portion of Simpson Lagoon, south of the Jones

Island group. This will limit potential noise and visual disturbance if polar bear family groups still remain at their den sites when Shell and its representative, Kuukpik/Veritas, are conducting seismic operations north of the islands.

Furthermore, Shell will provide copies of the polar bear observation form to all Shell contractors operating under the LOA. Report any polar bear sightings, signs to this office by phone, FAX, or email using the polar bear observation form. Report any possible den locations that are found during work activities immediately to our office.

If any changes develop in your project during the 2007 winter season, such as activities or location, please notify the Marine Mammals Management Office prior to the planned operation. This would allow us to evaluate the activity and, if appropriate, amend your LOA.

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. In addition, the Service believes that monitoring and protection measures for marine mammals described in Shell's Bear Avoidance and Human Encounter/Interaction plan are appropriate. 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.

In addition, this letter includes a harassment authorization (enclosed), for Shell and its representatives to take polar bears by harassment (deterrent activities) for the protection of both human life and polar bears while conducting activities in polar bear habitat for all 2007 Winter Seismic Survey areas. This authorization is issued specifically to Shell employees who are responsible for ensuring that trained and qualified personnel are assigned the task to harass (deter) polar bears. It is the responsibility of Shell personnel to report all polar bear harassment events to our Marine Mammals Management Office within 24 hours. This authorization is effective for the period, date of issuance to June 30, 2007. Intentional take is authorized under sections 101 (a)(4)(A), 109(h), and 112(c) of the Marine Mammal Protection Act.

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 in self-defense or to save the life of a person in immediate danger, and such taking is reported to the U.S. Fish and Wildlife Service, Marine Mammal Management Office within 24 hours.

Please review these authorizations. Should you have any further questions contact Mr. Craig Perham of our Marine Mammals Management Office at (907) 786-3800 or 786-3810.

Sincerely,

A handwritten signature in black ink that reads "Rosa Meehan". The signature is written in a cursive style with a long horizontal flourish at the end.

Rosa Meehan, Ph.D.  
Marine Mammals Management

Enclosure

cc: Mr. Dick Shideler, ADFG  
FFWFO  
Law Enforcement (LE)



IN REPLY REFER TO:

# United States Department of the Interior

FISH AND WILDLIFE SERVICE

1011 E. Tudor Rd.

Anchorage, Alaska 99503-6199

MMM

ISSUED: March 2, 2007  
EXPIRES: June 30, 2007

## LETTER OF AUTHORIZATION (07-04)

Shell Offshore, Inc. (Shell) is hereby authorized to take small numbers of polar bears incidental to activities occurring during the 2007 Beaufort Sea On-ice R & D Seismic Program. Shell plans to conduct an on-ice marine geophysical (seismic) research and development (R & D) program on Outer Continental Shelf (OCS) lease blocks located offshore from Oliktok Point, Milne Point, West Dock, or Endeavor Island in the Alaskan Beaufort Sea. This on-ice seismic R & D will consist of 35 linear miles of surveying within a 16 square kilometer area.

The LOA is valid from the date of issuance to June 30, 2007. This authorization and the required conditions below include contractors of Shell performing Shell-approved work under the scope of operations to be conducted. Authorization is subject to the following conditions:

1. The "Alaska North Slope, Chukchi and Beaufort Seas Polar bear, grizzly bear and Pacific Walrus Avoidance, Encounter, and Interaction Plan," dated December 2006, is approved and all provisions must be complied with unless specifically noted otherwise in this Letter of Authorization. A copy of this polar bear interaction plan must be available on site for all personnel.
2. Shell Operations Managers, or their designates, must be fully aware, understand, and capable of implementing the conditions of this authorization.
3. Intentional take is prohibited under this authorization.
4. This authorization is valid only for those activities identified in the request for a Letter of Authorization dated December 27, 2006.
5. Polar bear monitoring, reporting, and survey activities must be conducted in accordance with 50 CFR section 18.128. In addition, Shell must comply with the following monitoring, mitigation, and reporting requirements:

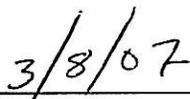
- Shell must cooperate with the Fish and Wildlife Service (Service), and other designated Federal, State, or local agencies to monitor the impacts of oil and gas exploration activities on polar bears;
- Shell must not conduct activities that operate nor pass within 1 mile of known polar bear dens, and all observed dens must be reported to the Marine Mammals Management Office, Fish and Wildlife Service immediately. Should occupied dens be identified within one mile of activities, work in the immediate area will cease and 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, and Shell must comply with any additional measures specified.
- If any changes develop in your project during the 2007 winter season, such as activities or location, notify the Marine Mammals Management Office prior to the planned operation.
- Shell 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;
- Every polar bear observed will be recorded on a Polar Bear Observation Form. Information within the observation report will include, but is not limited to:
  1. Date
  2. Time
  3. Observer name
  4. Contact number/email
  5. Location, with latitude, longitude, and datum, if applicable
  6. Weather conditions at time of observation
  7. Temperature
  8. Visibility
  9. Number of bears: sex and age
  10. Estimated closest point of bears from personnel and facilities
  11. Possible attractants present
  12. Bear behavior
  13. A description of the encounter
  14. Duration of the encounter
  15. Type of Deterrents used and distance from bear when used

16. Agency/Contacts

- Evidence of polar bears, such as tracks, carcass, or dens, will also be reported;
- At the discretion of the Fish and Wildlife Service, Shell must allow the Fish and Wildlife Service to place an observer on the site to monitor the impacts of the activity on polar bears;
- Shell must submit an annual monitoring report to the Marine Mammals Management Office as required under 18 CFR 18.128(f), which will be received by September 30, 2007.

6. This authorization expires June 30, 2007.

  
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Chief, Marine Mammals Management

  
\_\_\_\_\_  
Date



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## U.S. Fish and Wildlife Service

### AUTHORIZATION TO TAKE, BY HARASSMENT, POLAR BEARS

ISSUED: March 2, 2007  
EXPIRES: June 30, 2007

Under Sections 101 (a)(4)(A), 109(h), and 112(c) of the Marine Mammal Protection Act of 1972, as amended, Shell Offshore, Inc. (Shell) is authorized to take, by harassment, polar bears during exploration activities in association with the 2007 Beaufort Sea On-ice R & D Seismic Program. Shell plans to conduct an on-ice marine geophysical (seismic) research and development (R & D) program on Outer Continental Shelf (OCS) lease blocks located offshore from Oliktok Point, Milne Point, West Dock, or Endeavor Island in the Alaskan Beaufort Sea. This on-ice seismic R & D will consist of 35 linear miles of surveying within a 16 square kilometer area.

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

1. Prevent bears from associating food with humans and facilities;
2. "Train" bears to avoid people;
3. Allow bears to use travel routes (natural and man-made) to move along the coast;
4. Prevent bears from extended use of areas around facilities;
5. Prevent bears from entering the developed parts of the oilfield

Harassment authorization is subject to the following conditions:

1. The "Alaska North Slope, Chukchi and Beaufort Seas Polar bear, grizzly bear and Pacific Walrus Avoidance, Encounter, and Interaction Plan," dated December 2006, is approved and all provisions must be complied with unless specifically noted otherwise in this Letter of Authorization. A copy of this polar bear interaction plan must be available on site for all personnel.

2. Shell Operations Managers, or their designates, must be fully aware, understand, and capable of implementing the conditions of this authorization.
3. This authorization is restricted to harassment activities.
4. Authorized individuals are responsible for documenting and reporting to the U.S. Fish and Wildlife Service, Marine Mammals Management Office, (907) 786-3800, all instances involving harassment activities as soon as possible and not later than 24 hours after the occurrence.
5. Activities will not operate nor pass within 1 mile of known polar bear dens, and all observed dens will be reported to the Marine Mammals Management Office, Fish and Wildlife Service immediately. Should occupied dens be identified within one mile of activities, work in the immediate area will cease and Service will be contacted for guidance. The Service will evaluate these instances on a case-by-case basis to determine the appropriate action. Potential responses may range from cessation or modification of work to conducting additional monitoring.
6. A final report of all encounters and hazing events must be submitted to the U.S. Fish and Wildlife Service, Marine Mammals Management Office within 60 days from the expiration date of this authorization.
7. Hazing techniques must not cause the injury or death of a bear. Types of hazing techniques may include, but are not limited to:
  - Bear Monitors;
  - Air horns;
  - Electric fences;
  - Chemical repellents;
  - Acoustic recordings;
  - Vehicles;
  - Projectiles: cracker shells, bean bags, rubber bullets, screamers, etc.
8. Prior to conducting a harassment activity, operators must:
  - Reduce/eliminate attractants;
  - Secure site; notify supervisor; move personnel to safety;
  - Ensure bear has escape route(s);
  - Ensure communication with all personnel
9. When conducting a harassment activity, operators must:
  - 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 projectile (avoidance conditioning);

- Move bear in proper direction; continue with minimally necessary deterrents to receive desired result

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

- Monitor bear movement (to ensure no return);
- Notify supervisor and personnel to resume work;
- Fill out report to be sent to the Service as required under condition 4 (within 24 hours)

11. This 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.

Signed: Rosa Muel

Date: 3/12/07