



IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE

1011 E. Tudor Road
Anchorage, Alaska 99503-6199



AFES/MMM

JUL 8 2008

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

Dear Ms. Childs:

This responds to your April 15, 2008, request for Letters of Authorization (LOA) for the incidental and intentional take of polar bears in relation to the Shell Offshore, Inc. (Shell) 2008 Chukchi Sea Open-water Exploration Program.

Enclosed is a LOA (08-01-CS) that would allow Shell to take small numbers of polar bears and Pacific walrus incidental to oil and gas industry exploration activities identified in your LOA request. Shell, in partnership with geophysical contractors, will be conducting a three-dimensional (3D) seismic survey, site clearance, and shallow hazard surveys in the Chukchi Sea. The proposed start date for this project is mid-July 2008.

If any changes develop in your project during the 2008 open-water season, such as flight paths, activities or location, the Marine Mammals Management Office (MMM) must be notified prior to the planned operation. This will allow us to evaluate the activity and, if appropriate, amend the LOA.

This letter, through a separate authorization, also grants Shell authority to take polar bears by harassment (deterrence activities) for the protection of both human life and polar bears while conducting activities in polar bear habitat. This authorization allows only the harassment or deterrence of polar bears and does not authorize lethal take of a polar bear. 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. All polar bear harassment events are to be reported to our MMM within 24 hours. Observation forms can be sent by fax or electronic mail to our office. This authorization is effective from the date of issuance to November 30, 2008. Intentional take is authorized under sections 101(a)(4)(A), 109(h), and 112(c) of the Marine Mammal Protection Act (MMPA). A final report of all encounters and hazing events is due 60 days from the expiration of this authorization (by January 31, 2009).

In addition to protection measures for marine mammals described in the Shell polar bear

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interaction plan (Polar Bear and Pacific Walrus Awareness and Interaction Plan, North Slope and Chukchi Sea, Alaska, April 2008), the U.S. Fish and Wildlife Service (Service) believes that Shell personnel can limit human/polar bear interactions by being observant of approaching animals, such as through the use of marine mammal observers, and breaking off interactions, if practicable, thereby allowing the animals to continue their travel. Service biologists are available for consultation if questions or concerns arise regarding polar bears during the project period at the phone numbers listed below and noted in your interaction plan.

Any situations where the application of deterrents involves a safety risk to personnel should be avoided. 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.

Furthermore, in accordance with Section 7 of the Endangered Species Act of 1973, as amended (ESA), issuance of this LOA also fulfills the requirements for Tier 2 Consultation of the Programmatic Biological Opinion for the activities described herein. In the "Programmatic Biological Opinion for Polar Bears (*Ursus maritimus*) on Chukchi Sea Incidental Take Regulations" (June 2008; Tier 1 BO), the Service determined that the take anticipated as a result of the issuance of the Incidental Take Regulations is not likely to result in jeopardy to the polar bear, in accordance with Section 7 of the ESA. In order for the Tier 2 BO to be consistent with the "no jeopardy" conclusion of the Tier 1 BO and for an ESA incidental take statement (ITS) to be issued, the following need to occur: (1) the proposed activity must provide the required information, as described in §18.118 of the Regulations, (2) the LOA includes any mitigation measures that the MMM believes appropriate for the specific activity and location, as described in §18.118 of the Regulations, and (3) the MMM must determine that the incidental take for the specific activity will be consistent with the negligible impact finding for the total take allowed under the Incidental Take Regulations.

A reasonable and prudent measure and implementing terms and conditions were included for the MMM in the Tier 1 BO and have been incorporated into the LOA process. Issuance of this ITS with the LOA completes ESA requirements for authorization of incidental take of the polar bear. Compliance with the terms and conditions of this LOA ensures that the LOA holder is also in compliance with the ESA.

Ms. Susan Childs

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This authorization is issued in accordance with our regulations listed at 73 FR 33212, dated June 11, 2008. Should you have any further questions contact Mr. Craig Perham of our Marine Mammals Management Office at (907) 786-3800 or 786-3810.

Sincerely,


Acting Regional Director

Enclosure

cc: Mr. Rance Wall, MMS
Fairbanks Fish and Wildlife Field Office (FWFO)
USFWS Office of Law Enforcement (OLE)



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1011 E. Tudor Road
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AFES/MMM

ISSUED: July 7, 2008
EXPIRES: November 30, 2008

LETTER OF AUTHORIZATION (08-01-CS)

Shell Offshore, Inc. (Shell) is hereby authorized to take, by Level B Harassment only, small numbers of polar bears and Pacific walrus incidental to activities occurring during the 2008 Chukchi Sea Open-water Exploration Program. Shell and its geophysical contractors will be conducting site clearance, shallow hazard surveys, and a 3D seismic program in the Chukchi Sea. A detailed description of the authorized activity can be found in the "2008 Open Water Program Work Plan, Outer continental Shelf, Chukchi Sea, Alaska," dated April 2008.

The LOA is valid from the date of issuance to November 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 Operations Manager will be fully aware, understand and capable of implementing the conditions of this authorization.
2. This Authorization is valid only for activities (including support vessels and aircraft) described in Shell's April 15, 2008 application. Changes in the siting, timing, scope or nature of project activities will require prior review and approval.
3. The following documents are hereby approved, and all provisions unless specifically noted are incorporated into this authorization by reference:

- (a) *Marine Mammal Monitoring and Mitigation Plan for Seismic Exploration in the Alaskan Chukchi and Beaufort Seas, 2008*, October 2007. Received by the Service April 16, 2008.
- (b) *Polar Bear Interaction Plan* (Polar Bear and Pacific Walrus Awareness and Interaction Plan, North Slope and Chukchi Sea, Alaska, April 2008).
- (c) *2007 Plan of Cooperation with addendums Nos. 1 and 2*, including corresponding 2008 documentation.

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4. The holder of this Authorization is required to cooperate with the Service and any other Federal, state or local agency monitoring the impacts of the activity on walruses and polar bears.

5. At the discretion of the Service, the operator will allow the Service to place an observer on site (vessels and aircraft) to monitor the impacts of the activity on Pacific walruses and polar bears.

6. Prohibitions:

(a) Intentional take and lethal incidental take of walruses or polar bears is prohibited and may result in the modification, suspension or revocation of this Authorization.

(b) Any take that fails to comply with 50 CFR part 18 subpart I or the terms and conditions of this Letter of Authorization is prohibited and may result in the modification, suspension or revocation of this Authorization.

7. Mitigation, monitoring and reporting requirements:

(a) Operators must operate in full compliance with the mitigation, monitoring and reporting requirements identified in 50 CFR 18.118 and the approved documents identified in Condition 3 above.

(b) *Sound source verification report.* The results of field source verification and the distances to the various sound radii are to be reported to the Service within 5 days of completing the measurements.

(c) The holder must notify the Service Incidental Take Coordinator at least 24 hours prior to the start of collecting seismic data.

8. Activities related to the monitoring described in this Authorization do not require a separate scientific research permit issued under section 104 of the Marine Mammal Protection Act.

9. A copy of this Authorization, the Service-approved Marine Mammal Monitoring and Mitigation Plan, the Service-approved Polar Bear Interaction Plan, and the Service-approved Plan of Cooperation must be in the possession of the operator of all vessels and aircraft engaging in the activity operating under the authority of this Letter of Authorization.

10. Per the "Programmatic Biological Opinion for the Chukchi Sea Incidental Take Regulations for Polar Bear (June 2008)", your request also triggers the second of the two-tiered programmatic process. In order for incidental take of the polar bear to be exempted from the prohibitions of the ESA, the LOA also serves as an "Incidental Take Statement" (ITS), required under Section 7 of the Endangered Species Act of 1973 (ESA). Issuance of the LOA/ITS fulfills the requirements for Tier 2 Consultation of the Programmatic Biological Opinion for the activities described in this letter.

4. The holder of this Authorization is required to cooperate with the Service and any other Federal, state or local agency monitoring the impacts of the activity on walrus and polar bears.

5. At the discretion of the Service, the operator will allow the Service to place an observer on site (vessels and aircraft) to monitor the impacts of the activity on Pacific walrus and polar bears.

6. Prohibitions:

(a) Intentional take and lethal incidental take of walrus or polar bears is prohibited and may result in the modification, suspension or revocation of this Authorization.

(b) Any take that fails to comply with 50 CFR part 18 subpart I or the terms and conditions of this Letter of Authorization is prohibited and may result in the modification, suspension or revocation of this Authorization.

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U.S. Fish and Wildlife Service

AUTHORIZATION TO TAKE, BY HARASSMENT, POLAR BEARS

ISSUED: July 7, 2008

EXPIRES: November 30, 2008

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 2008 Chukchi Sea Open-water Exploration Program. Shell, in partnership with geophysical contractors, will be conducting site clearance, shallow hazard surveys, and a 3D seismic program in the Chukchi Sea. A detailed description of the authorized activity can be found in the, "2008 Open Water Program Work Plan, Outer continental Shelf, Chukchi Sea, Alaska," dated April 2008.

The purpose of authorizing taking by harassment, or deterrence, is to maintain human and bear safety and welfare during oil and gas activities. 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 "Polar Bear and Pacific Walrus Awareness and Interaction Plan, North Slope and Chukchi Sea, Alaska, April 2008," 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 of, understand, and be 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);

2. Shell Operations Managers, or their designates, must be fully aware of, understand, and be capable of implementing the conditions of this authorization.
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 - Reduce/eliminate attractants;
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 - 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: 
Date: JUL 8 2008