



# 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

JAN 14 2015

Ms. Susan Childs  
Shell Exploration and Production Company  
3601 C Street, Suite 1000  
Anchorage, Alaska 99503

Dear Ms. Childs:

We have received your requests dated December 9, 2014, for Letters of Authorizations (LOAs) for the incidental take of polar bears and Pacific walrus during activities associated with the Shell Exploration and Production (Shell) 2015/2016 Ice Overflight Surveys in the Beaufort and Chukchi seas, Alaska, including Helicopter Search and Rescue (SAR) Training in the Beaufort Sea.

In response, enclosed are two LOAs granting Shell authority to take small numbers of polar bears and Pacific walrus incidental to the activities identified in your requests in the Chukchi Sea (LOA 15-CS-01) and the Beaufort Sea (LOA 15-01). These authorizations are issued in accordance with Marine Mammal Protection Act Incidental Take Regulations published in the *Federal Register* (78 FR 35364), dated June 12, 2013, for the Chukchi Sea and *Federal Register* (76 FR 47010), dated August 3, 2011, for the Beaufort Sea. Please review these regulations.

Shell plans to conduct ice observation flights over the Chukchi and Beaufort seas from May 1, 2015 through April 30, 2016. In addition, Shell plans to conduct SAR training flights over the Beaufort Sea during the same time period (May 1, 2015 through April 30, 2016). More detailed descriptions can be found in: *Request for Letter of Authorization (LOA) for the Incidental Take of Polar Bears and Pacific Walrus, 2015/2016 Ice Overflight Surveys & Helicopter Search and Rescue Training Beaufort Sea, Alaska*, dated December 9, 2014 and *Request for Letter of Authorization (LOA) for the Incidental Take of Polar Bears and Pacific Walrus, 2015/2016 Ice Overflight Surveys Chukchi Sea, Alaska*, dated December 9, 2014.

An additional requirement of these LOAs is for Shell to provide observational data of polar bears throughout the project and a complete report of all observations at the conclusion of the projects. These final reports must be provided to the Marine Mammals Management Office (MMM) within 90 days after completion of the projects.

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 of bear encounter rates, take frequency, as well as the location and

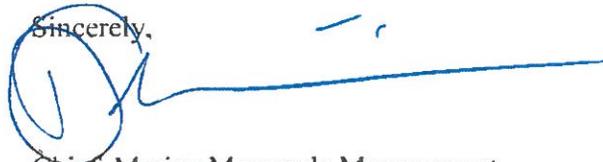
timing of encounters. Additionally, through monitoring, the Service seeks to limit disturbance to maternal polar bear den sites. Personnel must use caution when operating near these areas during the maternal denning period (mid-November to mid-April). If questions or concerns arise during the project period, U.S. Fish and Wildlife Service (Service) biologists are available for consultation at the phone numbers listed below and noted in your Interaction Plan.

If any changes develop in your project, such as activities or location, the MMM must be notified prior to the planned operation. This will allow us to evaluate the activity and, if appropriate, amend the LOA.

The Service has completed intra-Service consultation under the Endangered Species Act of 1973, as amended (ESA), 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 at (907) 786-3800 or (907) 786-3844.

Sincerely,

A handwritten signature in blue ink, consisting of a circular loop followed by a long horizontal line extending to the right.

Chief, Marine Mammals Management

Enclosure

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)



# 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

## LETTER OF AUTHORIZATION (15-CS-01)

ISSUED: May 01, 2015  
EXPIRES: April 30, 2016

Shell Exploration and Production (Shell) is hereby authorized to take small numbers of polar bears incidental to activities occurring during the 2015/2016 Ice Overflight Surveys in the Chukchi Sea. Shell's ice overflight surveys in the Chukchi Sea are planned to begin May 1, 2015 and run through April 30, 2016. A more detailed description of the proposed activity is included in Shell's *Request for Letter of Authorization (LOA) for the Incidental Take of Polar Bears and Pacific Walrus, 2015/2016 Ice Overflight Surveys Chukchi Sea, Alaska*, dated December 9, 2014.

This Letter of Authorization (LOA) and the required conditions below include contractors of Shell performing Shell-approved work under the scope of operations to be conducted. The LOA is subject to the following conditions:

1. Intentional take is prohibited under this LOA.
2. Shell Operations Managers, or designees, must be fully aware, understand, and be capable of implementing the conditions of this LOA.
3. The *Polar Bear, Pacific Walrus, and Grizzly Bear Avoidance and Human Encounter/Interaction Plan Exploration Drilling Program Chukchi Sea, Alaska (September 2014)* is approved. All provisions must be complied with unless specifically noted otherwise in this LOA. A copy of the plan must be available on site for all personnel.
4. This authorization is valid only for those activities identified in the request for a Letter of Authorization dated December 9, 2014, and described in the *Request for Letter of Authorization (LOA) for the Incidental Take of Polar Bears and Pacific Walrus, 2015/2016 Ice Overflight Surveys Chukchi Sea, Alaska*.
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 U.S. 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 one mile (1.6 km.) of known polar bear dens, and all observed dens must be reported to the Service's Marine Mammals Management Office (MMM) immediately. Should occupied dens be identified within one mile of activities, Shell must cease work in the immediate area and contact the MMM for guidance. The 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, and Shell must comply with any additional measures specified.
- Due to the importance of some coastal bluffs as polar bear denning habitat, flight paths for the surveys must be offset from the coastline of the Chukchi Sea by at least ½ mile (805 meters) and 1,500 feet (457 meters) above ground level.
- If requested, Shell must make flight paths of the ice observation flights available to the Service.
- If any changes develop in Shell's project during the 2015/16 season, such as flight paths, activities or location, Shell must notify the Service 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 must be recorded on a Polar Bear Observation Form. The observation report should include, but is not limited to:
  - a. Date.
  - b. Time.
  - c. Observer name.
  - d. Contact number/email.
  - e. Location, with latitude, longitude, and datum, if applicable.
  - f. Weather conditions at time of observation.
  - g. Temperature.
  - h. Visibility.
  - i. Number of bears: sex and age.
  - j. Estimated closest point of bears from personnel and facilities.
  - k. Possible attractants present.
  - l. Bear behavior. Before and after human interaction.
  - m. A description of the encounter.
  - n. Duration of the encounter.

o. Agency/Contacts.

- Evidence of polar bears, such as tracks, carcass, or dens, must also be reported.
- At the discretion of the Service, Shell must allow the Service to have an observer on the site to monitor the impacts of the activity on polar bears.
- Shell must submit a monitoring report to the Marine Mammals Management Office as required under 18 CFR 18.128(f), which will be received within 90 days after completion of the project.

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.



\_\_\_\_\_  
Chief, Marine Mammals Management

JAN 14 2015

\_\_\_\_\_  
Date



# 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

## LETTER OF AUTHORIZATION (15-01)

ISSUED: May 01, 2015  
EXPIRES: April 30, 2016

Shell Exploration and Production (Shell) is hereby authorized to take small numbers of polar bears incidental to activities occurring during the 2015/2016 Ice Overflight Surveys and Helicopter Search and Rescue training in the Beaufort Sea. Shell's ice overflight surveys in the Beaufort Sea are planned to begin May 1, 2015 and run through April 30, 2016. A more detailed description of the proposed activity is included in Shell's *Request for Letter of Authorization (LOA) for the Incidental Take of Polar Bears and Pacific Walrus, 2015/2016 Ice Overflight Surveys & Helicopter Search and Rescue Training Beaufort Sea, Alaska*, dated December 9, 2014.

This Letter of Authorization (LOA) and the required conditions below include contractors of Shell performing Shell-approved work under the scope of operations to be conducted. The LOA is subject to the following conditions:

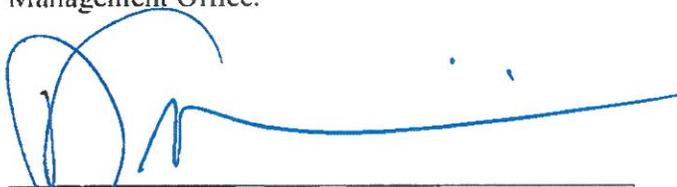
1. Intentional take is prohibited under this LOA.
2. Shell Operations Managers, or designees, must be fully aware, understand, and be capable of implementing the conditions of this LOA.
3. The *Polar Bear, Pacific Walrus, and Grizzly Bear Avoidance and Human Encounter/Interaction Plan 2011- 2016 Program Activity Beaufort Sea and Adjacent Northern Coast of Alaska*, October 2011 is approved. All provisions must be complied with unless specifically noted otherwise in this LOA. A copy of the plan must be available on site for all personnel.
4. This authorization is valid only for those activities identified in the request for a Letter of Authorization dated December 9, 2014, and described in the *Request for Letter of Authorization (LOA) for the Incidental Take of Polar Bears and Pacific Walrus, 2015/2016 Ice Overflight Surveys & Helicopter Search and Rescue Training Beaufort Sea, Alaska*.

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 U.S. 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 one mile (1.6 km.) of known polar bear dens, and all observed dens must be reported to the Service's Marine Mammals Management Office (MMM) immediately. Should occupied dens be identified within one mile of activities, Shell must cease work in the immediate area and contact the MMM for guidance. The 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, and Shell must comply with any additional measures specified.
  - Due to the importance of some coastal bluffs as polar bear denning habitat, flight paths for the surveys must be offset from the coastline of the Beaufort Sea by at least ½ mile (805 meters) and 1,500 feet (457 meters) above ground level.
  - If requested, Shell must make flight paths of the ice observation flights available to the Service.
  - If any changes develop in Shell's project during the 2015/16 season, such as flight paths, activities or location, Shell must notify the Service 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 must be recorded on a Polar Bear Observation Form. The observation report should include, but is not limited to:
    - p. Date.
    - q. Time.
    - r. Observer name.
    - s. Contact number/email.
    - t. Location, with latitude, longitude, and datum, if applicable.
    - u. Weather conditions at time of observation.
    - v. Temperature.
    - w. Visibility.
    - x. Number of bears: sex and age.
    - y. Estimated closest point of bears from personnel and facilities.

- z. Possible attractants present.
- aa. Bear behavior. Before and after human interaction.
- bb. A description of the encounter.
- cc. Duration of the encounter.
- dd. Agency/Contacts.

- Evidence of polar bears, such as tracks, carcass, or dens, must also be reported.
- At the discretion of the Service, Shell must allow the Service to have an observer on the site to monitor the impacts of the activity on polar bears.
- Shell must submit a monitoring report to the Marine Mammals Management Office as required under 18 CFR 18.128(f), which will be received within 90 days after completion of the project.

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.



---

Chief, Marine Mammals Management

JAN 14 2015

Date

---



# 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

JAN. 29 2015

Ms. Susan Childs  
Shell Exploration and Production Company  
3601 C Street, Suite 1000  
Anchorage, Alaska 99503

Dear Ms. Childs:

This letter serves as an amendment to Letter of Authorization (LOA) 15-CS-01 for the incidental take of polar bears and Pacific walruses in association with the Shell Exploration and Production (Shell) 2015/2016 Ice Overflight Surveys in the Chukchi Sea, Alaska. Letter of Authorization 15-CS-01 is amended to authorize the incidental take Pacific walrus (*Odobenus rosmarus divergens*) in addition to polar bears (*Ursus maritimus*). Condition number five of LOA 15-CS-01 is amended to include the following:

- Operators of support aircraft should, at all times, conduct their activities at the maximum distance possible from concentrations of walruses 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 ice or 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. When weather conditions do not allow the minimum stipulated flying altitude, such as during storms or when cloud cover is low, aircraft may be operated below the minimum altitudes stipulated above. However, when aircraft are operated at altitudes below the minimum stipulated flying altitude because of weather conditions, they must avoid areas of known walrus and polar bear concentrations and should take precautions to avoid flying directly over or within 1,610 m (1 mi) of these areas. Helicopters may not hover above or circle any of the areas described above.

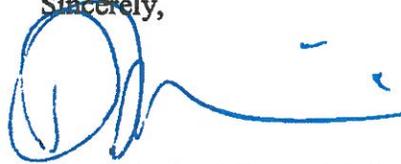
Ms. Susan Childs

2

All terms, conditions and stipulations contained in LOA 15-CS-01 are amended to include the aforementioned changes but remain otherwise unchanged. This amendment is effective immediately. The effective period for the LOA remains unchanged and expires April 30, 2016.

If any additional changes develop in your project during the 2015/2016 Ice Overflight Surveys, such as activities or location, notify us prior to the planned operation. This will allow us to evaluate the activity and, if appropriate, amend your LOA. If you have any further questions, please contact Mr. Christopher Putnam at (907) 786-3844.

Sincerely,

A handwritten signature in blue ink, consisting of a large, stylized initial 'C' followed by a long horizontal line that tapers to the right.

Chief, Marine Mammals Management

Enclosure

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)