United States Department of the Interior

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

IN REPLY REFER TO:

AFES/MMM

DEC 12 2011

Ms. Wanda Slocum
Senior Land Consultant
Repsol E&P USA, Inc.
2001 Timberlock Place, Suite 300
The Woodlands, Texas 77830

Dear Ms. Slocum:

This responds to your letter dated September 6, 2011, requesting a Letter of Authorization (LOA) for the incidental take of polar bears and walruses during activities for the Repsol E&P USA, Inc. (Repsol) 2011-2012 Winter Drilling Program in the Colville River delta area.

Enclosed is an LOA (11-31) that authorizes Repsol to take small numbers of polar bears and walruses incidental to oil and gas industry activities for this project at the locations identified in your LOA request.

Repsol proposes to conduct an oil and gas exploration drilling program on leases operated by Repsol during the 2011-2012 winter drilling season. The drilling program will include activities beginning during the summer of 2011 and ending during the summer of 2012. Proposed activities include:

- Summer field surveys for engineering, environmental, archaeological and cultural resources.
- Fall and early winter soil temperature monitoring and snow pre-packing for ice roads.
- Winter on-shore and off-shore ice road and ice pad construction.
- Winter and early spring drilling operations at up to four locations.
- Camps, rigs, vehicles and equipment to support these operations.
- Demobilization of equipment in the spring.
- Summer clean up operations.

A detailed description of the proposed activities and timelines may be found in Repsol's "Plan of Operations, 2011-2012 Winter Drilling Program, North Slope, Alaska (September 2011)". If any project changes develop during the spring 2012 season please notify the U.S. Fish & Wildlife Service (Service), Marine Mammals Management Office (MMM). This will 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

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bears by evaluating trends and effects of bear encounter rates, take frequency, as well as the location and timing of encounters. The Service believes that protection measures for polar bears described in Repsol's "Bear-Personnel Encounter Plan, 2011-2012 Winter Drilling Program, North Slope, Alaska (Revised October 27, 2011)," and "Plan of Operations, 2011-2012 Winter Drilling Program, North Slope, Alaska (September 2011)," contain appropriate safeguards to limit human/animal interactions and are hereby incorporated into the terms of the LOA by reference. Repsol field camps and personnel can limit encounters of polar bears by being observant of approaching animals (i.e., the use of polar bear guards) and breaking off interactions, if practicable, by allowing the animals to continue their travel. We encourage Repsol to implement the terms of this plan. 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.

Historical polar bear denning activity reveals that some creek cutbanks and river bluffs provide suitable denning habitat for polar bears, especially in and around the larger, braided rivers, such as the Colville River delta and Kalubik Creek. Approximately 1782 miles (2870 km) of potential polar bear denning habitat is located between the Colville River and the Canning River; of that, approximately 300 miles (480 km) of potential polar bear habitat occurs within the boundaries of the above-mentioned oilfield unit. Disturbance during denning could lead to abandonment of dens and possible mortality to cubs. Use caution when operating near these areas during the maternal denning period (late October to mid April). Polar bear den detection surveys will be required prior to Repsol beginning operations.

The U.S. Geological Survey has posted information regarding polar bear denning habitat including the polar bear den habitat GIS coverage 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 now available for downloading on the ASC website (http://alaska.usgs.gov/science/biology/polar_bears/pubs.html). Please use these resources when planning activities in potential denning areas and contact us immediately if any dens are found during your activities. A current polar bear observation form is also enclosed for your use.

Also enclosed is an Intentional Harassment Authorization (11-INT-24) for Repsol and its representatives to take polar bears by harassment (deterrent activities) for the protection of both human life and polar bears while conducting project activities in polar bear habitat. This authorization is issued specifically to Repsol 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 Repsol personnel to report all polar bear harassment events to our MMM office within 24 hours. Intentional take is authorized under sections 101 (a)(4)(A), 109(h), and 112(c) of the Marine Mammal Protection Act (MMPA).

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, MMM office within 24 hours.

Per the Programmatic Biological Opinion (Tier 1 BO) for the Beaufort Sea Incidental Take Regulations for Polar Bear, Pacific Walrus, and Polar Bear Critical Habitat (Regulations) (July 2011), issuance of this LOA also completes consultation for polar bears, Pacific walrus, and polar bear critical habitat pursuant to section 7 of the Endangered Species Act (ESA) of 1973, as amended. This LOA also serves as an "Incidental Take Statement" (ITS), which is required by the ESA in order for incidental take to be authorized.

Reasonable and prudent mitigation measures, as well as implementing terms and conditions were included for the Service, 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.

An additional requirement of this LOA is for Repsol to provide observational data of polar bears throughout the project and a complete report of all observations at the conclusion of the project to the MMM. This report meets the tracking and reporting requirements relative to the documentation of take as required by the MMPA and the ESA.

This authorization is issued in accordance with MMPA Incidental Take Regulations published in the *Federal Register* (76 FR 47010), dated August 3, 2011. Please review these regulations. If you should have any further questions, please contact Mr. Craig Perham, at (907) 786-3810, or Mr. Christopher Putnam, at (907) 786-3844, of our Marine Mammals Management Office.

Sincerely,

Jenifer Kohout
Acting Chief, Marine Mammals Management

Enclosures

cc: Mr. Richard Shideler, ADF&G
Fairbanks Fish and Wildlife Field Office (FFWFO)
Office of Law Enforcement (OLE)
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
(11-31)

ISSUED: December 7, 2011
EXPIRES: December 7, 2012

Repsol E&P USA, Inc. (Repsol) is hereby authorized to take small numbers of polar bears incidental to activities occurring during the 2011-2012 Winter Drilling Program in the Colville River delta area.

This authorization and the required conditions below include contractors of Repsol performing Repsol-approved work under the scope of operations to be conducted. This authorization is subject to the following conditions:

1. The Repsol "Bear-Personnel Encounter Plan, 2011-2012 Winter Drilling Program, North Slope, Alaska (Revised October 27, 2011)," and "Plan of Operations, 2011-2012 Winter Drilling Program, North Slope, Alaska (September 2011)," are approved and all provisions must be complied with unless specifically noted otherwise in this Letter of Authorization (LOA). A copy of the Bear-Personnel Encounter Plan must be available on site for all personnel.

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

3. Intentional take is prohibited under this LOA.

4. This authorization is valid only for those activities identified in the request for a Letter of Authorization dated September 6, 2011, for the 2011-2012 Winter Drilling Program in the Colville River Delta area.

5. Polar bear monitoring, reporting, and survey activities will be conducted in accordance with 50 CFR 18, Section 18.128. The basic monitoring and reporting requirements follow:

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- Repsol 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.

- Repsol must not conduct activities that operate nor pass within one mile (approximately 1600 meters) of known polar bear dens, and all observed dens must be reported to the Service, Marine Mammals Management Office (MMM), upon discovery. Should occupied dens be identified within one mile of activities, work within 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 Repsol must comply with any additional measures specified. Polar bear den detection surveys may be required prior to Repsol beginning operations.

- Repsol 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.

- Repsol must allow the Service to have an observer on the site to monitor the impacts of the activity on polar bears, at the discretion of the Service.

- Repsol must submit an annual monitoring report to the Service, MMM as required under 18 CFR 18.128(f), which will be received up to 90 days after the expiration date of the LOA.

6. Prior to the initiation of winter activities Repsol will conduct a polar bear den detection survey around the vicinity of well sites, Qugruk #1 and #2, and the designated freshwater sources for Repsol's ice roads. These areas are designated as Areas 1, 2, 3, and 4 on the map provided to the Service by Wanda Slocum, Senior Land Consultant, with correspondence dated November 30, 2011. Only these areas will be surveyed for maternal polar bear dens. Area 5 will not be included in the den detection survey as this water source is "tentative." Repsol will provide a written report to the Service within two weeks of completion of the survey. The report will describe the findings of the den detection survey.

7. In the Programmatic Biological Opinion for Polar Bears, Pacific Walrus, and Polar Bear Critical Habitat on Beaufort Sea Incidental Take Regulations (Regulations) (July 2011), the Service determined the total incidental take anticipated as a result of the issuance of the Regulations is not likely to result in jeopardy to the polar bear or Pacific walrus, and will not adversely modify polar bear critical habitat. In order for an Incidental Take Statement (ITS) under the Endangered Species Act (ESA) of 1973, as amended to be provided: (1) the proposed activity must provide the required information, as described in the §18.124 of the Regulations; (2) the LOA must include mitigation measures appropriate for the specific activity and location, as described in §18.128 of the Regulations; and (3) the incidental take for the specific activity must be consistent with the negligible impact finding for the total take allowed under the Regulations.

We (MMM) have determined that the proposed actions meet these three requirements. Therefore, issuance of this LOA also completes ESA requirements for authorization of incidental take of the polar bear. Compliance with the terms and conditions of the above LOA insures that the LOA holder is also in compliance with the ESA.

8. This LOA 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.

Jennifer Kohut

Acting Chief, Marine Mammals Management

12/12/11

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 (11-INT-24)

ISSUED: December 7, 2011
EXPIRES: December 7, 2012

Under Sections 101(a)(4)(A), 109(h) and 112(c) of the Marine Mammal Protection Act of 1972, as amended, Repsol E&P USA, Inc. (Repsol) is authorized to take, by harassment, polar bears during activities for the 2011-2012 Winter Drilling Program in the Colville River delta 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. "Condition" bears to avoid people (avoidance conditioning).
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 oil field.

Harassment authorization is subject to the following conditions:

1. The Repsol "Bear-Personnel Encounter Plan, 2011-2012 Winter Drilling Program, North Slope, Alaska (Revised October 27, 2011)," and "Plan of Operations, 2011-2012 Winter Drilling Program, North Slope, Alaska (September 2011)," are approved and all provisions must be complied with unless specifically noted otherwise in this Letter of Authorization (LOA). A copy of the Bear-Personnel Encounter Plan must be available on site for all personnel.

2. Repsol Operations Managers, or designates, must be fully aware, understand, and be capable of implementing the conditions of this authorization.

3. This LOA is restricted to harassment activities and is valid only for those activities identified in the request for a Letter of Authorization dated September 6, 2011, for the 2011-2012 Winter Drilling Program in the Colville River Delta area.

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4. Authorized individuals are responsible for documenting and reporting to the U.S. Fish and Wildlife Service (Service), Marine Mammals Management Office (MMM), (907) 786-3800, all instances involving harassment activities as soon as possible and not later than 24 hours after the occurrence.

5. Repsol is responsible for ensuring that trained and qualified personnel are assigned the task of deterring polar bears.

   - Repsol has indicated that firearms based deterrents will not be used during this project; therefore, this LOA does not authorize any harassment associated with firearms based deterrent methods.
   - Should Repsol choose to utilize firearms as a deterrent tool in the future, Repsol shall be solely responsible for ensuring that their personnel meet Federal and State laws and regulations regarding the use and carry of firearms.
   - Furthermore, if firearms are to be used as a deterrent tool, Repsol shall be solely responsible for ensuring that a Service-approved procedure for handling less-lethal ammunition in a safe and proper manner is on file with the Service, MMM.

6. Repsol will not conduct activities that operate nor pass within one mile (approximately 1600 meters) of known polar bear dens, and all observed dens will be reported to the Service, MMM immediately. Should occupied dens be identified within one mile of activities, work in the immediate area will cease and Repsol will contact the Service 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. Repsol must comply with any additional measures specified. Polar bear den detection surveys may be required prior to Repsol beginning operations.

7. A final report of all encounters and hazing events must be submitted to the Service, MMM within 60 days from the expiration date of this authorization.

8. 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.

9. Prior to conducting a harassment activity, operators must:

   - Make a reasonable effort to reduce or eliminate attractants.
   - Secure site; notify supervisor; move personnel to safety.
   - Ensure bear has escape route(s).
   - Ensure communication with all personnel.

10. When conducting a harassment activity, operators must:

- 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 projectile (avoidance conditioning).
- Move bear in proper direction; continue with minimally necessary deterrents to receive desired result.

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

- Monitor bear's 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 number 4, above, (within 24 hours)

12. This LOA 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.

Jennifer Koehnt

Acting Chief, Marine Mammals Management Office

12/12/11

Date

United States Department of the Interior
Fish And Wildlife Service
1011 E. Tudor Road
Anchorage, Alaska 99503-6199

POLAR BEAR SIGHTING REPORT

Company: _____ **LOA #:** _____
Date: _____ **Observer Name:** _____
Time: _____ **am / pm / 24** **Phone/Email:** _____

Location: _____

_____

Latitude: _____ **Longitude:** _____ **Datum:** _____

Weather Conditions: Fog_____ Snow_____ Rain_____ Clear_____ Temperature_____°F / °C

Wind Speed_____ mph / kts Wind Direction (from)_____ N NE E SE S SW W NW

Visibility: Poor_____ Fair_____ Good _____ Excellent_____

Number of Bears: (total number of bears & how many of each type) **Total # Bears** _____

	adult	sub-adult	2 year-old	yearling	cub of year
Male	_____	_____	_____	_____	_____
Female	_____	_____	_____	_____	_____
Unknown	_____	_____	_____	_____	_____

Closest Distance of Bear(s): from personnel_____ facility_____ m / yd / ft

Bear Behavior (Initial Contact): curious ignore aggressive walk run swim hunt feed rest other _____

Bear Behavior (After Contact): curious ignore aggressive walk run swim hunt feed rest other _____

Description of Encounter: _____

_____

_____

_____

Duration of Encounter: _____ **Possible Attractants Present:** Y / N

Describe Attractants: _____

Deterrents Used & Distance: Y / N m / yd / ft

_____ Vehicle
_____ Horn/Siren/Noise
_____ Spotlight/Headlight
_____ Crackershell
_____ Rubber Bullet
_____ Bean Bag
_____ Other (describe)
_____
_____

Agency/Contacts:
USFWS Craig Perham (786-3810) (FAX: 786-3816) _____ Time _____ Date _____
ADF&G Dick Shideler (459-7283) (FAX: 459-7332)_____ Time _____ Date _____
Other _____ Time _____ Date _____