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 01 2011

Mr. William "Randy" Reed
Permits and Regulatory Compliance
CGGVeritas
2450 Cinnabar Loop
Anchorage, Alaska 99507

Dear Mr. Reed:

This responds to the your request submitted on behalf of CGGVeritas (Veritas) to the U.S. Fish and Wildlife Service (Service) dated October 21, 2011, requesting a Letter of Authorization (LOA) for the incidental take of polar bears for the Tabasco 3D seismic program for oil and gas exploration.

Enclosed is an LOA (11-27), that authorizes Veritas to take small numbers of polar bears incidental to oil and gas industry exploration activities at the locations identified in your LOA request that are within the geographical region of the Beaufort Sea Incidental Take Regulations.

Activities will occur within the defined area of the Tabasco 3D project located in the Colville River Delta. If additional seismic prospects outside of the area previously identified are developed during the 2011-2012 winter season you are requested to notify the Service, Marine Mammals Management Office (MMM) of their locations prior to the planned operation. This will allow us to evaluate the activity and, if appropriate, to amend your LOA.

Historic polar bear denning activity reveals that polar bear denning habitat occurs along creek cutbanks and river bluffs. For example, approximately 1782 miles (2870 km) of potential polar bear denning habitat is located between the Colville River and the Canning River alone. 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 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, please use caution when operating near these areas, such as the Colville River Delta – a known polar bear denning area, during the maternal denning period (mid November to mid April). Veritas will also: 1) provide copies of the polar bear observation form to all Veritas contractors operating under the LOA; 2) report any polar bear sightings, signs to this office by phone, FAX, or email using the polar bear observation form; and 3) report any possible den locations that are found during work activities immediately to our office.

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The U.S. Geological Survey has posted information regarding polar bear denning habitat including the polar bear den habitat GIS coverage at 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. Service biologists are also 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 Veritas 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 2011-2012 Seismic Survey areas. This authorization is issued specifically to Veritas 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 Veritas 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 in 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 by 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 polar bears. 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 Veritas 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,

Rosa Meehan, Ph.D.
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
(11-27)

ISSUED: November 30, 2011
EXPIRES: June 30, 2012

CGGVeritas (Veritas) is hereby authorized to take small numbers of polar bears incidental to activities occurring during the 2012 Winter Seismic Survey Program, entitled "Tabasco 3D." Activities for this project are discussed in detail in the, "Plan of Operations; 2012 Winter Seismic Survey, Tabasco 3D North Slope, Alaska, State Lands and Waters," received with your application packet.

This authorization is subject to the following conditions:

1. The Operations Manager, or equivalent, will be fully aware, understand and capable of implementing the conditions of this authorization.

2. This authorization is valid only for those activities identified in the request for a Letter of Authorization (LOA) dated October 25, 2011.

3. The Polar Bear Interaction Plan (APPENDIX B, Field Operating Procedure, Polar Bear Protocol and APPENDIX C, Polar Bear Awareness and Interaction Plan) is hereby approved, and all provisions unless specifically noted are incorporated into this authorization by reference. A copy of the current Polar Bear Interaction Plan must be available on site for all personnel.

4. Intentional take is prohibited under this authorization.

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:

- Veritas must cooperate with the Service, and other designated Federal, State, or local agencies to monitor the impacts of oil and gas activities on polar bears.

- Veritas must not conduct activities that operate nor pass within one mile (approximately 1600 meters) of known polar bear dens, and all observed

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dens must be reported to the U. S. Fish and Wildlife Service (Service), Marine Mammals Management Office (MMM), within 12 hours of discovery. Should occupied dens be identified within one mile of activities, work within the immediate area will cease and the 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 Veritas must comply with any additional measures specified.

- Veritas 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. Evidence of polar bears, such as tracks, carcass, or dens, will also be reported.

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

- Veritas must submit an annual monitoring report to the Service, MMM as required under 50 CFR 18.128(f), which will be received up to 90 days after the expiration date of the LOA.

6. 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) to be provided: (1) the proposed activity must provide the required information, as described in the §18.124 of the Regulations, (2) the LOA includes mitigation measures appropriate for the specific activity and location, as described in §18.128 of the Regulations, and (3) that the incidental take for the specific activity will be consistent with the negligible impact finding for the total take allowed under the Regulations.

We (MMM) have determined that the proposed action meet these three requirements. Therefore, issuance of this LOA also completes Endangered Species Act (ESA) of 1973, as amended requirements for authorization of incidental take of polar bears. Compliance with the terms and conditions of the above LOA ensures that the LOA holder is also in compliance with the ESA.

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.

Rosa Mack

Chief, Marine Mammals Management

DEC 0 1 2011

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-21)

ISSUED: November 30, 2011
EXPIRES: June 30, 2012

CGGVeritas (Veritas) is hereby authorized to take small numbers of polar bears incidental to activities occurring during the 2012 Winter Seismic Survey Program, entitled "Tabasco 3D." Activities for this project are discussed in detail in the, "Plan of Operations; 2012 Winter Seismic Survey, Tabasco 3D North Slope, Alaska, State Lands and Waters," received with your application packet.

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 oilfield.

This harassment authorization is subject to the following conditions:

1. The Polar Bear Interaction Plan (APPENDIX B, Field Operating Procedure, Polar Bear Protocol and APPENDIX C, Polar Bear Awareness and Interaction Plan) is hereby approved, and all provisions unless specifically noted are incorporated into this authorization by reference. A copy of the current Polar Bear Interaction Plan must be available on site for all personnel.

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

3. This authorization is restricted to harassment activities.

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

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- In the event that firearms are used as a deterrent tool, Veritas is solely responsible for ensuring that their personnel meet Federal and State laws and regulations regarding the use and carry of firearms.
- Furthermore, Veritas is solely responsible for ensuring that a U.S. Fish and Wildlife Service (Service)-approved procedure for handling less-lethal ammunition in a safe and proper manner is on file with the Service, Marine Mammals Management Office (MMM), if firearms are to be used as a deterrent tool.

5. Authorized individuals are responsible for documenting and reporting to the Service, MMM, at (907) 786-3800, all instances involving harassment activities as soon as possible and not later than 24 hours after the occurrence.

6. Harassment and Intentional Take (or project activities) will not occur nor pass within one mile (approximately 1600 meters) of known polar bear dens. All observed dens will be reported to the Service, MMM within 12 hours. Should occupied dens be identified within one mile of activities, work in the immediate area will cease and the Service, MMM 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. Veritas must comply with any additional measures specified.

7. To meet basic polar bear monitoring and reporting requirements, Veritas shall:

- Cooperate with the Service to monitor the impacts of project activities on polar bears.
- Designate a qualified individual or individuals to observe, record, and report the sightings of polar bears.
- Report all sightings of polar bears or polar bear signs (using the polar bear observation form) within 24 hours of initial observation by FAX to (907) 786-3816 or email to craig_perham@fws.gov.
- Submit a final report to the Service, MMM within 60 days after the expiration of this authorization.

8. Harassment, or deterrent 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 and/or "screamers."

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

- Reduce/eliminate attractants.

- Secure site, notify supervisor and move personnel to safety.
- Ensure bear has an escape route(s).
- Ensure communication with all personnel.

10. When conducting a harassment activity, operators must:

- Chose the method that will have the least adverse effect on the bear and only increase the intensity of the method, or use additional methods, if necessary.
- Shout at the bear before using projectile (avoidance conditioning).
- Move bear in safe direction and continue with minimal necessary deterrents to achieve desired result.

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

- Monitor bears 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 five above (within 24 hours).

12. 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.

Robert Mecl

Chief, Marine Mammals Management

DEC 01 2011

Date