

MARINE MAMMAL COMMISSION
4340 East-West Highway, Room 700
Bethesda, MD 20814-4447

20 January 2009

Mr. P. Michael Payne
Chief, Permits Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway, Room 13635
Silver Spring, MD 20910

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the application from CGGVeritas seeking an incidental harassment authorization under section 101(a)(5)(D) of the Marine Mammal Protection Act. We have also reviewed the Service's 19 December 2008 *Federal Register* notice (73 Fed. Reg. 77623) soliciting comments on the application. The applicant is seeking authorization to take small numbers of ringed seals by harassment incidental to an on-ice marine geophysical and seismic survey in the U.S. Beaufort Sea to be carried out from 15 February to 31 May 2009.

The Service has preliminarily determined that the proposed operations would result only in short-term and localized behavioral changes of small numbers of ringed seals. It believes that such changes would have no more than a negligible impact on these populations and would not have an unmitigable adverse impact on the availability of seals for subsistence uses. The Service anticipates that no take by Level A harassment (injury) or deaths will occur as a result of the planned survey and that harassment takes should be at the lowest level practicable due to incorporation of the proposed mitigation measures. The Service considers it unlikely that spotted or bearded seals will be encountered during the proposed operations.

RECOMMENDATION

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the requested authorization, provided that—

- the proposed monitoring and mitigation measures are carried out as described in the application and in the Service's *Federal Register* notice with the exception that, if trained dogs are not available for the initial survey, the Service not accept monitoring by humans as an alternative until it has been demonstrated that such monitoring is as effective as that carried out using dogs;
- operations be suspended immediately if a dead or seriously injured ringed seal is found in the vicinity of the operations and the death or injury could be attributable to the applicant's activities. Any suspension should remain in place until the Service has (1) reviewed the situation and determined that further deaths or serious injuries are unlikely or (2) issued regulations authorizing such takes under section 101(a)(5)(A) of the Act; and

- if other species of marine mammals (e.g., bearded or spotted seals or beluga or bowhead whales) are observed in the vicinity of the survey, activities be suspended until the animals depart or the applicant has requested and received authorization to take such species.

RATIONALE

The applicant plans to use vibroseis to conduct an on-ice seismic survey in the U.S. Beaufort Sea. The survey would be conducted from mid-February through May 2009 over a 141-mi² area north and northwest of Thetis Island. The proposed operations would include the use of industry-standard vibrator vehicles and tracked vehicles for crew transport and technical support. A temporary field camp, consisting of 35 to 40 sled trailers to house the crew, etc., would be located near the work site. No under-ice acoustic sources would be deployed. The applicant and the Service estimate that up to 76 ringed seals could be taken by Level B harassment during the proposed on-ice seismic surveys.

The Commission concurs with the Service's preliminary determination that the impact of the proposed operations on ringed seals is expected to be negligible because—

- trained dogs would be used in areas of sea ice beyond the 3-m depth contour to locate seal structures under the snow in advance of seismic operations, GPS coordinates would be taken, the locations of seal structures would be marked and monitored, and adjustments to the seismic operations would be made to avoid the structures. Subnivean structures that are located would be categorized by size, structure, and odor to ascertain whether they are birthing lairs, resting lairs of non-reproductive females, resting lairs of rutting male seals, or breathing holes. Any locations of seal structures would be marked and protected by a 150-m exclusion distance from any existing routes and on-ice seismic activities. In addition, during active seismic vibrator source operations, a dynamic 150-m exclusion zone would be established around the operations and monitored for entry by any marine mammals. The applicant would be required to avoid any pressure ridges, ice ridges, and ice deformation areas where seal structures are likely to be present; and
- the applicant is consulting with the potentially affected communities of Nuiqsut and Barrow, the Kuukpik Subsistence Oversight Panel, and other stakeholder groups to develop a plan of cooperation to ensure that there would be no unmitigable impacts to subsistence use of marine mammal species or stocks resulting from the proposed activities.

With respect to the first point, the Commission notes that the *Federal Register* notice and the application state that if trained dogs are not available, potential seal structures would be identified by trained marine mammal biologists based on the characteristics of the ice (i.e., deformation, cracks, etc.). The Commission has noted previously that it believes that the use of trained dogs is the only reliable method for locating ringed seal lairs and other structures. The Marine Mammal Commission recommends that if trained dogs are not available for the initial survey, the Service not accept monitoring by humans as an alternative until it has been demonstrated that such monitoring is as effective as that carried out using dogs.

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The Commission concurs that it is unlikely that the planned activities would take incidentally other species of marine mammals, such as beluga whales and bowhead whales. However, milder winters associated with climate change may make some of the planned survey area accessible to those species earlier in the year than normal. We are assuming that, in this situation, the ice would be too thin to support the vibrator vehicles. If this is not the case, and the applicant might conduct the survey at times when beluga whales or bowhead whales are near enough that they might be taken by harassment, the Marine Mammal Commission recommends that the National Marine Fisheries Service require the applicant to suspend operations until either (1) the animals move out of the area or (2) the applicant has requested and received authorization to take such species. Further, because the Service is not planning to authorize the incidental taking of spotted or bearded seals, the Marine Mammal Commission recommends that the Service impose the same requirements if these species occur in the area of operations during the proposed survey and associated activities.

The *Federal Register* notice and the application state that polar bears and walrus occur in this area of the Beaufort Sea in the March-to-May period and that the applicant is seeking authorization from the U.S. Fish and Wildlife Service to take these species incidental to the proposed activities.

Please contact me if you have any questions concerning these recommendations and comments.

Sincerely,



Timothy J. Ragen, Ph.D.
Executive Director