



# United States Department of the Interior



U.S. FISH AND WILDLIFE SERVICE  
1011 East Tudor Road  
Anchorage, Alaska 99503-6199

IN REPLY REFER TO

FWS/R7

**JUN 07 2019**

Mr. David Miles  
CGG Canada Services Limited  
2505 Meadowvale Boulevard  
Mississauga, Ontario L5N 5S2

Dear Mr. Miles:

Thank you for contacting the U.S. Fish and Wildlife Service (Service) regarding your plans to conduct an Airborne Gravity Gradiometer survey over the coastal plain of the Arctic National Wildlife Refuge (Arctic Refuge). The proposed survey area is within the boundaries of the area identified for oil and gas leasing in the 2017 Tax Cuts and Jobs Act, also known as the "1002 Area", and is depicted in a figure and GIS files you provided to the Bureau of Land Management (BLM) and the Service. Per your email to the Service on May 22, 2019, the proposed survey would be conducted out of Prudhoe Bay between mid-July to late-August, and take 15 days or approximately 130 flight hours to complete within a possible window of 30 days. The proposed aircraft is a twin engine Basler BT7 flying at an altitude of approximately 500 feet (ft) and 1600 foot spacing between transects. The transects are oriented north-south across the proposed project area.

After review of the information provided, the assessment of the Service's Marine Mammals Management (MMM) program is that the potential to take polar bears incidental to your proposed activities is high enough that it cannot be discounted. CGG Canada Services Limited (CGG) can implement mitigation measures to reduce the probability of take, such as flying at an elevation in excess of 1,500 ft and avoiding the coast from late July onward by re-orienting the survey lines from a north-south pattern to an east-west pattern and focusing on the northern most surveys first. Given the project description, these mitigation measures could reduce, but would not eliminate the potential for take of polar bears. Therefore, in order to obtain authorization for the incidental take of polar bears and ensure compliance with the Marine Mammal Protection Act, we recommend that you submit an application for an Incidental Harassment Authorization to the MMM's Regulatory Program.

It is our understanding that no federal permit, funding or involvement in your proposed survey has been identified and therefore there is no requirement for consultation under Section 7 of the Endangered Species Act.

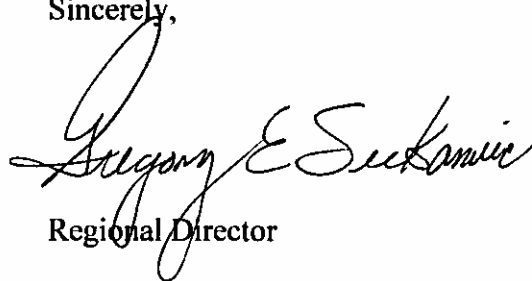
In addition to the above recommendations regarding polar bears, we have coordinated with Service staff from the Arctic Refuge and they stated that low-level overflights (below 1500 ft above ground level) may disturb caribou with calves. We note that the probability of your activities disturbing caribou and migratory birds during the sensitive calving and nesting period on the coastal plain is reduced given that you propose to not begin the study until mid-July. We recommend CGG contact Mr. Steve Berendzen, the Arctic Refuge Manager, just prior to conducting the proposed survey, so that we can evaluate satellite collar data to identify any large aggregations of caribou we would request be avoided.

Subsistence hunters from the community of Kaktovik conduct harvest of marine mammals, fish, and caribou during the proposed survey period. We recommend CGG contact the community to make them aware of the proposed activity and request recommendations for appropriate measures to minimize impacts on hunters and fishermen.

Finally, the Service would like to make CGG aware that there is a considerable amount of aircraft activity planned for the coastal plain of the Arctic Refuge during the proposed survey period. The Oil and Gas Coordinator, Mr. Josh Rose ([joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)), can provide further information to assist in planning and safety.

For any questions regarding these recommendations, please contact the Chief, MMM Program, Dr. Patrick Lemons via email at [patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov) or the Manager of the Arctic Refuge, Mr. Berendzen at [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov).

Sincerely,



Gregory E Seckman

Regional Director