United States Department of the Interior

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

IN REPLY REFER TO:

AFES/MMM

SEP 11 2013

Mr. Troy Nelson
TGS
2500 CityWest Boulevard, Suite 200
Houston, Texas 77042

Dear Mr. Nelson:

On June 28, 2013, the U.S. Fish & Wildlife Service, Marine Mammals Management office (Service) issued TGS a Letter of Authorization (LOA 13-CS-03) granting authorization to take small numbers of polar bears and Pacific walruses incidental to activities associated with the TGS 2013 Two-Dimensional Seismic Acquisition, Chukchi Sea, Alaska Program. The LOA is effective from June 28, 2013, through October 31, 2013. Stipulation 9(B)(iii) in LOA 13-CS-03 states that "TGS may not transit through or conduct seismic operations in areas of the Hanna Shoal Walrus Use Area (HSWUA) between July 1 and September 30 unless the area is outside of the monthly 50% utilization distribution contours[1] (UDs) for Pacific Walruses during the month of transit or seismic operations."

During a meeting on August 29, 2013, TGS agreed to provide the Service at least 48 hours notice prior to entering into any area within the outer boundary of the HSWUA through September 30, 2013. On September 7, 2013, the Service received email communication from the TGS contracted vessel *Geo Arctic* that she was prepared to enter into the HSWUA within approximately 62 hours along survey line 3021 at roughly 71°30" North and 163°50" West. The Service is not able to provide more specific information at this time on Pacific Walrus locations than what TGS currently has available. If the Service develops new information on walrus locations we will communicate it to TGS.

Based on the most recent information the Service has on Pacific walrus distributions and densities in the Chukchi Sea, the Service anticipates that TGS may encounter large concentrations of walruses along the proposed seismic data acquisition lines within the HSWUA. If TGS proceeds with the proposed seismic data acquisition lines within the HSWUA, because, as noted below, strict compliance with the stipulations of this LOA and the mitigation measures at 50 CFR §18.118 are required, you may not be able to conduct some of your planned operations in the proposed area within the HSWUA.

[1] The 50 % UDs is described in 78 FR 35364 (June 12, 2013) and based on, Jay, C.V., A.S. Fischbach, and A.A. Kochnev. 2012. Walrus areas of use in the Chukchi Sea during sparse sea ice cover. Marine Ecology Progress Series Vol. 468: 1–13, 2012. GIS files available at, https://www.erma.unh.edu/arctic/erma.htm.

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Authorization to operate within the HSWUA is contingent upon strict compliance with 50 CFR §18.118 and all stipulations described LOA 13-CS-03. Specifically, the Service places emphasis upon the following stipulations found in LOA 13-CS-03:

- 9(A)(i), At all times, vessels must maintain the maximum distance possible from concentrations of walruses or polar bears. Under no circumstances, other than an emergency, should any vessel approach within an 805-meter (m) (0.5-mile [mi]) radius of walruses or polar bears observed on ice. Under no circumstances, other than an emergency, should any vessel approach within 1,610 m (1 mi) of groups of walruses observed on land or within an 805-m (0.5-mi) radius of polar bears observed on land;

- 9(A)(ii), Vessel operators must take every precaution to avoid harassment of concentrations of feeding walruses when a vessel is operating near these animals. Vessels should reduce speed and maintain a minimum 805-m (0.5-mi) operational exclusion zone around groups of 12 or more walruses encountered in the water. Vessels may not be operated in such a way as to separate members of a group of walruses from other members of the group. When weather conditions require, such as when visibility drops, vessels should adjust speed accordingly to avoid the likelihood of injury to walruses;

- 9(C)(v), Adaptive response for walrus aggregations. Whenever an aggregation of 12 or more walruses are detected within an acoustically verified 160 dB re 1 μPa disturbance zone ahead of or perpendicular to the seismic vessel track, the holder of this LOA must;
  (a) Immediately power down or shutdown the seismic airgun array and/or other acoustic sources to ensure sound pressure levels at the shortest distance to the aggregation do not exceed 160–dB re 1 μPa;
  (b) Not proceed with powering up the seismic airgun array until it can be established that there are no walrus aggregations within the 160 dB zone based upon ship course, direction, and distance from last sighting. If shutdown was required, the ramp-up procedures must be followed when restarting;

- 9(E)(iv), Notification of incident report. Reports should include all information specified under the species observation report, as well as a full written description of the encounter and actions taken by the operator. The operator must report to the Service within 24 hours;
  (a) Any incidental lethal take or injury of a polar bear or walrus;
  (b) Observations of walruses or polar bears within prescribed mitigation monitoring zones.

The following additional mitigation and monitoring stipulations are amended to LOA 13-CS-03 during TGS activities within the HSWUA in accordance with 50 CFR §18.118(a)(4)(v):

- TGS must increase observation for Pacific walruses to include a 360° observation radius around all vessels and report on the behavior of observable walruses within that radius

with particular attention to behavior before, during and after a vessel moves past observed walruses;

- TGS must notify the Service within 24 hours if walruses are observed within ½ mile (805 meters) of a vessel;
- TGS must notify the Service within 24 hours if 500 or more walruses are observed within 9.3 mi (15 kilometers) within a 24 hour period (each 24 hour period beginning at midnight of a calendar day) of a vessel; and
- If TGS is not able to implement a mitigation measure the Service must be notified immediately (or as soon as possible) for each incident.

Failure to comply with the stipulations in LOA 13-CS-03 and this letter may result in, but may not be limited to, additional monitoring and mitigation measures, a Notice of Violation from the Service, revocation of authorization to operate within the HSWUA and/or revocation of incidental take authorization for Pacific walruses.

The Service acknowledges the limited information currently available to further specify Pacific walrus locations, distributions and densities in the HSWUA. If TGS is able to provide additional information regarding Pacific walrus locations in addition to the vessel based observations, such as could be gained by reconnaissance, the Service is willing to work cooperatively with TGS to design and implement appropriate cooperative aerial surveys for Pacific walruses, or other survey actions. The Service may be able to modify monitoring and mitigation measures based on any additional information we receive regarding the location, density and distribution of Pacific walruses in the Chukchi Sea and the HSWUA specifically.

The additional monitoring and mitigation requirements to LOA13-CS-03 contained within this letter are effective through October 31, 2013 unless further modified by the Service.

If you have any further questions, please contact Mr. Craig Perham or Mr. Christopher Putnam of our Marine Mammals Management Office, at (907) 786-3810 or (907) 786-3844, respectively.

Sincerely,

Acting Chief, Marine Mammals Management

Enclosure

cc: Ms. Elizabeth Benson, ASRC Energy Services (email)
Ms. Megan Blees, ASRC Energy Services (email)
U.S. Fish and Wildlife Service, Fairbanks Fish and Wildlife Field Office
U.S. Fish and Wildlife Service, Office of Law Enforcement
North Slope Borough, Department of Law