



United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT

Alaska OCS Region

3801 Centerpoint Drive, Suite 500

Anchorage, Alaska 99503-5823

AUG 31 2012

Mr. William Jeffress
Designated Agent for AuruMar Alaska, Inc.
SRK Consulting
4710 Business Park Blvd. Suite F-40
Anchorage, Alaska 99503

Dear Mr. Jeffress:

The application by AuruMar Alaska, Inc., dated July 25, 2012, requests a Federal permit to conduct geophysical prospecting operations for mineral resources other than oil, gas, and sulphur on certain Outer Continental Shelf (OCS) lands. The activity is in the Norton Sound area offshore Nome, Alaska, as shown on the map accompanying your application. The application specified C&C Technologies, West Coast, will conduct the subject operations using the equipment described in the permit application. Operations were proposed to begin on July 30, 2012, or after permit issuance, and to be completed on or before December 31, 2012. AuruMar will conduct a high-resolution geophysical prospecting survey using side scan sonar, multibeam echosounder, and chirp and S-Boom subbottom profilers.

OCS Permit 12-02 is hereby granted to conduct geophysical exploration operations on the OCS in the area and manner described in the application beginning on or after August 31, 2012. All operations are subject to the enclosed approved Permit for Geophysical Exploration for Mineral Resources on the OCS and the attached permit stipulations. The information contained in the following paragraphs should be evaluated before initiating operations and appropriate action taken:

The Endangered Species Act (ESA) states there shall be no activity conducted which might jeopardize the continued existence of an endangered species or result in the destruction or adverse change of habitat of such species. In addition, the Marine Mammal Protection Act (MMPA) provides there shall be no unauthorized take of marine mammals. "Take" means to harass, hunt, capture, collect, kill, or attempt to harass, hunt, capture, collect or kill any marine mammals. Whenever marine mammals are encountered in the project vicinity, AuruMar Alaska, Inc., and its contractors should exercise precautions to assure that activities are not in violation of the provisions of the MMPA or the ESA.

The National Marine Fisheries Service (NMFS) has listed humpback, fin, and bowhead whales and Stellar sea lions as endangered species that could possibly be found in the project area. The U.S. Fish and Wildlife Service (FWS) have listed polar bears as a threatened species and spectacled eiders as an endangered species, but few, if any, are likely to be in the Nome area during the open

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water season. Particular attention should be given to minimize adverse encounters between the project operations and marine mammals.

Further information on the identification and occurrence of marine mammals in the proposed area of operations and the provisions and penalties of the ESA and the MMPA are available. This information may be obtained from the

U.S. Fish and Wildlife Service
Alaska Region
1011E.Tudor Road
Anchorage, Alaska 99503
Telephone (907) 786-3467

And from the

National Marine Fisheries Service
222 West 7th Avenue, Box 43
Anchorage, Alaska 99513
Telephone (907) 271-5006

This permit is effective from the date of approval until December 31, 2012, or the completion of the survey, whichever occurs earlier. Please be advised that this office requires a weekly report of daily operations including environmental compliance actions; due to the short duration of the proposed activity, daily operation reports will be accepted in lieu of a single weekly report. We will require a completion report within 30 days following cessation of field operations.

Sincerely,



Rance R. Wall
Regional Supervisor
Resource Evaluation

3 Enclosures
Permit 12-02 Stipulations
Form BOEM-0134
Permit Form BOEM-0135

G&G PERMIT STIPULATIONS
Bureau of Ocean Energy Management Alaska OCS Permit 12-02

- No solid or liquid explosives shall be used without specific approval.
- Operations shall be conducted in a manner to ensure that they will not cause pollution, cause undue harm to aquatic life, create hazardous or unsafe conditions, or unreasonably interfere with other uses of the area. Any difficulty encountered with other uses of the area or any conditions which cause undue harm to aquatic life, pollution, or could create a hazardous or unsafe condition as a result of the operations under this permit shall be reported to the Supervisor. Serious or emergency conditions shall be reported without delay.
- Vessels should avoid concentrations or groups of marine mammals. Operators should, at all times, conduct their activities at a maximum distance from such concentrations of marine mammals.
- When a vessel is operated near a concentration of marine mammals, the operator must take every precaution to avoid harassment of these animals. Therefore, vessels should reduce speed when within 300 yards (274 km) of marine mammals and those vessels capable of steering around such groups should do so. Vessels may not be operated in such a way as to separate members of a group of marine mammals from other members of the group.
- Vessel operators should avoid multiple changes in direction and speed when within 300 yards (274 km) of marine mammals. In addition, operators should check the waters immediately adjacent to a vessel to ensure that no marine mammals will be injured when the vessel's propellers (or screws) are engaged.
- Small boats should not be operated at such a speed as to make collisions with marine mammals likely. When weather conditions require, such as when visibility drops, vessels should adjust speed accordingly to avoid the likelihood of injury to marine mammals.
- When any Permittee becomes aware of the potentially harassing effects of operations on endangered marine mammals, or when any Permittee is unsure of the best course of action to avoid harassment of endangered marine mammals, every measure to avoid further harassment should be taken until the National Marine Fisheries Service (NMFS) or US Fish and Wildlife Service (FWS) is consulted for instructions or directions. However, human safety will take precedence at all times over the guidelines and distances recommended herein for the avoidance of disturbance and harassment of endangered marine mammals.

The monitoring and mitigation measures, which follow, are related to the requirements of the Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA).

- Exclusion Zone – An exclusion zone around the oceanographic-survey sound source shall be free of marine mammals before the survey can begin and must remain free of marine mammals during the survey operations. The purpose of the exclusion zone is to protect marine mammals from Level A harassment (injury) and Level B harassment (change of behavior). No Level A harassment (injury) takes are likely to occur from the survey

operations because the sound level from the subbottom profiler to be used in the survey is 220 dB at the source. Level B harassment (change of behavior) takes could occur if marine mammals come closer than 11 meters (36 ft) from the source. The exclusion zone for the AuruMar survey is 200 meters (650 ft) around the survey vessel.

- Monitoring of the Exclusion Zone – A dedicated Protected Species Observer (PSO) on the survey vessel shall continuously monitor the 200 meter (650 ft) exclusion zone around the survey vessel for the presence of marine mammals to maintain a marine-mammal-free exclusion zone and monitor for avoidance or take behaviors during the operation of the subbottom profilers. The PSO on watch must have no other assigned duties during that time. If a marine mammal is observed within the exclusion zone, the subbottom profilers must be shut down until the exclusion zone is free of marine mammals. The subbottom profilers may be started up after the PSO has verified that the exclusion zone is clear of marine mammals. If marine mammals are sighted heading towards the exclusion zone, the vessel may alter course away from the animals to avoid their entering the zone.
- Shut Down – The operation of the subbottom profilers shall be suspended until the exclusion zone is free of marine mammals. If the subbottom profiler is completely powered down for any reason during nighttime or poor sighting conditions, it shall not be re-energized until daylight or whenever sighting conditions allow for the exclusion zone to be effectively monitored.
- Reporting Requirements –In addition, operators must report immediately any shut downs due to a marine mammal entering the exclusion zone and provide the BOEM with information on the date/time, location, distance from the vessel, and the types, numbers, and behaviors of marine mammals (if possible to ascertain) entering the exclusion zone.
- All bird-vessel collisions shall be documented. Minimum information will include species, date/time, location, weather, and operational status of the survey vessel when the strike occurred. Photographs would be helpful to confirm species identification. The FWS does not recommend the treatment/transport of injured or dead birds due to the concerns about avian influenza. Bird collision information will be sent to BOEM within 72 hours.