

Notice of Preparation of an Environmental Assessment for a 2010 Geological and Geophysical (G&G) Permit to Conduct an Exploration Seismic Survey in the Beaufort and Chukchi Seas Outer Continental Shelf

The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), Alaska Region is preparing an Environmental Assessment (EA) for a proposed 2010 exploration seismic survey on the Beaufort and Chukchi Seas outer continental shelf (OCS). ION Geophysical Corporation (ION) has submitted a G&G permit application and supporting documents to collect geophysical data throughout the Beaufort Sea OCS and the northeastern portion of the Chukchi Sea OCS for use in evaluating potential hydrocarbon accumulations.

ION's proposal is to collect two-dimensional (2D) seismic, gravity, and magnetic data in the Beaufort and Chukchi seas from late September through December 15, 2010. The proposed survey would involve one seismic survey vessel and one support vessel for approximately 80-days of data acquisition. The seismic vessel *R/V Bos Atlantic* would tow a 4,330 cubic inch (in³) airgun array and one hydrophone streamer, as stated in the Incidental Harassment Authorization application submitted to the National Marine Fisheries Service (NMFS) and Letter of Authorization application submitted to the U.S. Fish and Wildlife Service (USFWS). A single 60-in³ airgun will be continuously operated during routine activities, such as making turns between survey lines, to maintain a minimal sound level as a deterrent to approaching marine mammals. The *M/V Talagy*, a polar class icebreaker, would accompany the survey vessel and be used for ice breaking, marine mammal monitoring, and logistical support. An additional vessel, the *M/V Polar Prince*, a class 2 icebreaker, would transit from and back to Tuk in the Canadian Arctic once during the course of the survey to refuel and resupply the *R/V Bos Atlantic* and *M/V Talagy*.

Ion submitted the following documents in support of their G&G permit:

- A Plan of Operations and Environmental Evaluation Document
- A Plan of Cooperation (POC)
- Copies of ION's applications to the NMFS and the USFWS for incidental take authorizations under the Marine Mammal Protection Act (MMPA).

The following documents were submitted as a part of the application to USFWS:

- Vessel-Based Monitoring, Mitigation, and Reporting Plan
- Polar Bear and Pacific Walrus Awareness and Interaction Plan

The following National Environmental Policy Act (NEPA) documents have addressed issues and potential effects of seismic surveys. The BOEMRE is using the information in these documents in preparing the EA.

- Final Programmatic Environmental Assessment, Arctic Ocean Outer Continental Shelf, Seismic Surveys – 2006 (OCS EIS/EA MMS 2006-038) June 2006. (2006 Final Seismic PEA)
- Final Environmental Impact Statement, Beaufort Sea Planning Area Oil and Gas Lease Sales 186, 195 and 202—2003 (OCS EIS/EA MMS 2003-001) February 2003.

- Environmental Assessment, Proposed OCS Lease Sale 202 Beaufort Sea Planning Area—2006 (OCS EIS/EA MMS 2006-001) August 2006
- Environmental Assessment, Proposed Lease Sale 195 Beaufort Sea Planning Area (OCS EIS/EA MMS 2004-028) July 2004

The following issues and concerns have been identified by the technical analysts for consideration in this EA:

- potential effects of seismic survey sound on bowhead and beluga whale migration patterns;
- potential effects of seismic survey sound and icebreaking on marine fish and essential fish habitat;
- potential effects of seismic survey operations and icebreaking on marine mammals, marine birds, threatened and endangered species and proposed polar bear critical habitat; and
- potential effects of seismic survey operations on subsistence activities.

ION's permit application was posted on the BOEMRE website in late February 2010. ION presented information on their proposed seismic survey to the public at the Open Water Meeting (<http://www.nmfs.noaa.gov/pr/permits/openwater.htm>) held by NMFS and BOEMRE on March 22-24, 2010. ION held public meetings in the potentially affected North Slope communities of Barrow, Nuiqsut and Kaktovik. This notice provides additional opportunity for the public to provide input that may inform the decisionmaking process, prior to a decision being made by the Responsible Official(s). Public input may include issues or information regarding potential environmental effects that should be considered in the preparation of the EA. Written, facsimile, hand-delivered, and electronic comments will be accepted for consideration through August 20, 2010, to: Dr. Cleveland Cowles, Regional Supervisor, Leasing and Environment, Bureau of Ocean Energy Management, Regulation, and Enforcement, 3801 Centerpoint Drive, Suite 500, Anchorage, AK, 99503, or by email to: akwebmaster@boemre.gov, or by fax to (907) 334-5242.

ION's G&G permit application is posted to the BOEMRE website at: <http://alaska.boemre.gov/re/recentgg/recentgg.htm>. The application is also available for review at 3801 Centerpoint Drive, Suite 500, Anchorage, Alaska or by calling (907) 334-5200 (8:30 am – 4:30 pm Alaska Daylight Time). The NEPA documents referenced above, as well as other NEPA documents prepared by the Alaska Region, are available at http://alaska.boemre.gov/ref/EIS_EA.htm.