

Environmental Stewardship Branch
6 Bruce Street
Mount Pearl NF A1N 4T3

March 14, 2008

File No.: 4194-10

Ms. Kim Coady
Canada Newfoundland Offshore Petroleum Board
Fifth Floor, TD Place
140 Water Street
St. John's, NF A1C 6H6

Dear Ms. Coady:

**RE: StatoilHydro Geohazard and Seismic Program EA, Jeanne
d'Arc Basin, Offshore Newfoundland**

EAS 2008-022

As requested in your letter of January 31, 2008, Environment Canada has reviewed the EA Report for the StatoilHydro Jeanne d'Arc Basin Geohazard and Seismic Program for 2008-2016. From the information provided it is understood that the project involves conducting an initial 3-D (and potential 4-D extension in cooperation with Petro-Canada) seismic survey in 2008 and subsequent surveys (3-D and potentially 2-D and/or 4-D), as well as geohazard surveys, over the remaining eight years.

The following EC comments stem from the department's mandate under the *Migratory Birds Convention Act* (MBCA) and Section 36 of the *Fisheries Act*. Pertinent EC expertise, and related comments, also originate with the *Canadian Environmental Protection Act* (CEPA), the *Canadian Wildlife Act*, and the *Species at Risk Act* as well as *Department of the Environment Act*.

REVIEW COMMENTS

Regulatory Requirements

Meeting the requirements of the federal *Fisheries Act* is mandatory. Subsection 36(3) of the *Act* specifies that unless authorized by federal regulation, no person shall deposit or permit the deposit of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water.

Migratory birds, their nests, eggs, and young are protected under the *Migratory Birds Convention Act* and *Regulations*. The proponents should be reminded that they are expected to comply with the *Migratory Birds Convention Act* and *Regulations* during all project phases. Migratory birds include those species listed in the CWS Occasional Paper *Birds protected in Canada under the Migratory Birds Convention Act*.

Under the *Migratory Birds Convention Act* and *Regulations* no person shall deposit or permit to be deposited oil, oily wastes or any other substance harmful to migratory birds in any waters or any

area frequented by migratory birds. In addition, no person shall disturb, destroy, or take a nest, egg, nest shelter, eider duck shelter or duck box of a migratory bird.

The proponent should also be aware of the potential applicability of the *Canadian Environmental Protection Act* (CEPA). The *Canadian Environmental Protection Act* enables protection of the environment, and human life and health, through the establishment of environmental quality objectives, guidelines and codes of practice, and the regulation of toxic substances, emissions and discharges from federal facilities, international air pollution, and ocean dumping.

Migratory Birds & Species at Risk

Section 5.6.3.3 Attractions to Lights on Ships

The report documenting stranded birds should be delivered to CWS at the end of the fiscal year (March 31), not at the end of the calendar year.

Data Collection

CWS has developed a pelagic seabird monitoring protocol that we are recommending for all offshore projects. These protocols are a work in progress and we would appreciate feedback from the observers using them in the field. A guide sheet to the pelagic seabirds of Atlantic Canada is available through CWS in Mount Pearl.

A report of the seabird monitoring program, together with any recommended changes, is to be submitted to CWS on a yearly basis.

Oil Spills

CWS is concerned about the potential for dielectric oil to be released from the streamer. According to reports from seismic exploration off Nova Scotia, these leaks do not appear to be rare events. Even small spills of oil can have very serious effects on migratory birds and under the *Migratory Birds Regulations*, “no person shall deposit or permit to be deposited oil, oil wastes or any other substance harmful to migratory birds in any waters or any area frequented by migratory birds.” Therefore, every effort should be taken to ensure that no oil leaks occur and that a contingency plan in case of oil leaks is prepared. If dielectric oil is dispersible, then supplies of dispersants with application machinery should be available and an approved dispersant application plan should be put into place prior to any seismic activities.

Effects of the Environment on the Project

Seismic operations will be somewhat sensitive to environmental conditions (e.g., wind, waves, ice). The EA should focus on how such conditions acting on the project could have consequences for the environment (e.g., increased risk of spills and impacts on valued ecosystem components).

Effects of Accidents and Malfunctions

The mandatory assessment of environmental effects which could result from accidents and malfunctions should include a consideration of potential spill events, such as spills from damaged seismic streamers. This assessment should focus on potential worst –case scenarios (e.g., concentrations of marine birds, presence of wildlife at risk). Based on this analysis, the EA should

describe the precautions that will be taken and the contingency measures that will be implemented to avoid or reduce the identified impacts.

In developing a contingency plan that would support the assessment of accidents and malfunctions, and a determination that impacts could be avoided or reduced, it is recommended that the Canadian Standards Association publication, *Emergency Planning for Industry* CAN/CSA-Z731-95 (Reaffirmed 2002), be consulted as a useful reference.

All spills or leaks, including those from machinery, fuel tanks or streamers, should be promptly contained, cleaned- up and reported to the 24-hour environmental emergencies reporting system (1-800-563-9089).

I trust that this information will be of assistance in your review of this proposal. If you wish to discuss these comments or have further questions, please do not hesitate to contact me at your convenience.

Yours truly,

Original Signed by Jeanette Goulet

Jeanette Goulet
Environmental Assessment Officer
Environmental Protection Directorate
EPOD/NL

Attachment

cc K. Power
S. Zwicker