

1. Data Gaps

The EA should identify any limitations in the availability of data for the project area. Consideration should be given to the importance of data and data collection to the assessment of project impacts.

2. Assessment of Cumulative Effects

Given increasing levels of activity in the Newfoundland offshore area, the consideration of cumulative effects should be addressed in the EA of the proposed project.

The analysis of project-specific impacts should be placed in the context of multiple existing and reasonably foreseeable stress sources influencing the fate of environmental components (e.g., air emissions, marine birds). Accordingly, consideration of cumulative effects should be reflected throughout EA documentation (i.e., rather than appended to each section). Consideration of regional impact thresholds, as well as monitoring needs would be valuable to this discussion.

3. Emissions to the Atmosphere

The EA should identify and estimate expected air emissions (e.g., CO<sub>2</sub>, CH<sub>4</sub>, PM, SO<sub>2</sub>, VOCs, PAHs) from project activities (i.e., 18 wells) in conjunction with their sources (e.g., flaring, on-board power generation, transportation, fugitive emissions). Emission estimates should use specific emission factors and referenced data, or be calculated from emissions from similar projects, where available. Professional judgment may be used where data are insufficient.

The EA should provide an inventory of GHG emissions, in equivalent amounts of carbon dioxide, along with a discussion of measures that have been considered and/or are proposed to reduce or monitor GHG emissions. Guidance on the assessing the effects of GHG emissions on the environment can be found in the document entitled, *Incorporating Climate Change Considerations in Environmental Assessment: General Guidance for Practitioners* (Federal-Provincial-Territorial Committee on Climate Change and Environmental Assessment, 2003).

4. Migratory Birds

In **Figure 1.1** on Page 2 of the project description, it appears that several of the important bird areas (IBA) are labeled incorrectly. The IBA labeled Cape Freels should be Wadham Islands. Gull Island (Cape Freels) should be relabeled Cape Freels. Goldmine Head should be relabeled Grates Point. The Cape St. Francis and Bell Island South Coast IBA’s have been left off the map altogether, and should be added. See Figure 3-1 in the following publication.

Russell J. and D. Fifield 2001. Marine Bird Important Bird Areas on the Northeast Coast of Newfoundland: Conservation Concerns and Potential Strategies. Can. Nature Fed., Bird Studies Can., Natural History Society of Newfoundland and Labrador, 124pp.

5. Discharges and emissions

Chlorinated wastewater effluent through once-use coolant systems is listed as a toxic substance under the Canadian Environmental Protection Act (CEPA) 1999. It is recommended that the EA include a discussion of alternatives to chlorine use and whether these are feasible for the proposed project.

**The following information is provided for project planning and any questions should be directed at the applicable government agency.**

***Fisheries Act***

The deposit of a deleterious substance into waters frequented by fish is prohibited under Section 36. The *Compliance and Enforcement Policy for the Habitat Protection and Pollution Prevention Provisions of the Fisheries Act* is accessible at [http://www.ec.gc.ca/ele-ale/policies/policies\\_e.asp](http://www.ec.gc.ca/ele-ale/policies/policies_e.asp).

***Canadian Environmental Protection Act (CEPA)***

CEPA and its complementary management instruments (e.g., agreements, regulations, notices, codes of practice, guidelines, policies, plans) govern such matters as environmental quality, toxic substances, hazardous waste management and disposal at sea. CEPA provisions and associated management instruments which should be taken into account include the following:

- Canadian Environmental Quality Guidelines.
- National Ambient Air Quality Objectives.
- Toxic Substances listed in Schedule 1 of CEPA and any related management instruments.
- New Substances Notification Regulation.
- Environmental Emergency Regulations.

Detailed information is accessible at <http://www.ec.gc.ca/CEPARRegistry/regulations>. The *Compliance and Enforcement Policy for the Canadian Environmental Protection Act, 1999* can be accessed at [http://www.ec.gc.ca/ele-ale/policies/policies\\_e.asp](http://www.ec.gc.ca/ele-ale/policies/policies_e.asp).

***Migratory Birds Convention Act and associated Regulations***

Migratory birds, their eggs, nests and young are protected under the *Migratory Birds Convention Act* (MBCA) and complementary regulations. Migratory birds include those species listed in the Canadian Wildlife Service Occasional Paper No. 1 *Birds Protected in Canada under the Migratory Birds Convention Act* (1991). The Act and regulations include the following prohibitions:

- "no person shall disturb, destroy or take a nest, egg, nest shelter, eider duck shelter or duck box of a migratory bird";
- "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".

The MBCA, regulations and related guidance are accessible at [http://www.cws-scf.ec.gc.ca/enforce/law\\_1\\_e.cfm](http://www.cws-scf.ec.gc.ca/enforce/law_1_e.cfm).

The department’s *Compliance and Enforcement Policy for Wildlife Legislation*, which includes the MBCA, is accessible at [http://www.cws-scf.ec.gc.ca/enforce/pol\\_1\\_e.cfm](http://www.cws-scf.ec.gc.ca/enforce/pol_1_e.cfm).

### ***Species at Risk Act***

The federal *Species at Risk Act* (SARA) is now in force with the exception of the prohibition and penalty provisions which will come into effect in June 2004. SARA affords protection to wildlife species listed in Schedule 1 of the Act.

The goal of the SARA is to prevent endangered or threatened wildlife from becoming extinct or lost from the wild (i.e., extirpated), and to help in the recovery of these species. It is also intended to prevent species of special concern from becoming endangered or threatened. Further information on SARA including listed species is accessible at <http://www.sararegistry.gc.ca>.

### **Data Sources**

*Climatological data* can be found on the World Wide Web at <http://www.climate.weatheroffice.ec.gc.ca/>, and value-added data can be obtained by consulting EC's Atlantic Climate Centre. Contact:

Atlantic Climate Centre  
77 Westmorland Street, Suite 260  
Fredericton, New Brunswick E3B 6Z3  
Phone: New Brunswick: (506) 451-6006  
Phone: Nova Scotia and Prince Edward Island: (902) 426-9226  
Phone: Newfoundland and Labrador: (709) 772-4695  
Fax: (506) 451-6010  
E-Mail: [climate.atlantic@ec.gc.ca](mailto:climate.atlantic@ec.gc.ca)

*Sea ice data* can be obtained by contacting EC's Canadian Ice Service. The Ice Service website is available from <http://ice-glaces.ec.gc.ca/>, or one can contact:

Canadian Ice Service - Client Services  
373 Sussex Drive, Block E, Third Floor  
Ottawa, Ontario K1A 0H3  
Phone: (613) 996-1550 or toll-free in Canada 1-800-767-2885  
Fax: (613) 947-9160  
E-Mail: [cis-scg.client@ec.gc.ca](mailto:cis-scg.client@ec.gc.ca)

*Wave data* can be obtained from MEDS (Marine Environmental Data Service). The MEDS website is <http://www.meds-sdmm.dfo-mpo.gc.ca/>, or one can contact:

Marine Environmental Data Service  
Department of Fisheries and Oceans  
W12082 - 200 Kent Street  
Ottawa, Ontario, Canada K1A 0E6  
General Inquiries: (613) 990-6065  
Request Services: (613) 990-0243  
Fax: (613) 993-4658  
E-mail: [services@meds-sdmm.dfo-mpo.gc.ca](mailto:services@meds-sdmm.dfo-mpo.gc.ca)

*North Atlantic wind and wave climatology*: The AES40 North Atlantic Wind and Wave Climatology, derived from over 40 years of kinematically reanalyzed winds (using US National Centres for Environmental Prediction [NCEP] reanalysis winds as background) and ocean wave model reanalysis data, is described at <http://www.oceanweather.com/metocean/aes40/index.html>. For access, commercial interests can contact Oceanweather at [oceanwx@oceanweather.com](mailto:oceanwx@oceanweather.com). Canadian operators and researchers, can contact:

Val R. Swail  
Manager, Climate Data and Analysis Section  
Climate Research Division  
Science and Technology Branch  
Environment Canada  
4905 Dufferin Street  
Downsview, Ontario M3H 5T4 Canada  
Phone: 416-739-4347  
Fax: 416-739-5700  
E-mail: Val.Swail@ec.gc.ca

A subset of the AES40 North Atlantic Wind and Wave Climatology, for Canadian waters, is available from the Atlantic Climate Centre, or from the MEDS. *Global wind and wave climatology* - The KNMI/ERA-40 WAVE ATLAS derived from 45 years of European Centre for Medium-Range Weather Forecasts (ECMWF) reanalysis data, is available online at: <http://www.knmi.nl/waveatlas>.

*Marine observations and climatology* - the International Comprehensive Ocean-Atmosphere Dataset, maintained by the US National Oceanic and Atmospheric Administration (NOAA)'s Earth System Research Laboratory, is available online at: <http://icoads.noaa.gov/>.

A Climatology of Hurricanes for Canada, Improving Our Awareness of the Threat, Part I: Storm Tracks and Geographical Statistics is available from the Canadian Hurricane Centre ([http://www.atl.ec.gc.ca/weather/hurricane/climatology/preview\\_e.html](http://www.atl.ec.gc.ca/weather/hurricane/climatology/preview_e.html)). For more information, contact:

Peter Bowyer  
Program Manager, Canadian Hurricane Centre  
Environment Canada  
(902) 426-9181  
E-mail: [peter.bowyer@ec.gc.ca](mailto:peter.bowyer@ec.gc.ca)

*Tropical cyclone climatology, including tracks* are maintained by the US National Hurricane Centre and available online at: <http://www.nhc.noaa.gov/pastall.shtml>.

*Extratropical cyclone climatology* - The Atlas of Extratropical Storm Tracks, derived from US Reanalysis Data, and produced by NASA's Goddard Institute of Space Science, is available online at: <http://data.giss.nasa.gov/stormtracks/>.