



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

**Eastern Arctic Area**

P.O. Box 358  
Iqaluit, NU X0A 0H0  
Phone: (867) 979-8000  
Fax : (867) 979-8039

**Secteur de l'Arctique de l'est**

Boîte postale 358  
Iqaluit, NU X0A 0H0  
Tél: (867) 979-8000  
Télécopieur: (867) 979-8039

Our file / Notre référence

NU-02-0117

February 25, 2007

Mr. Joe Murdock  
Director of Technical Services  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, Nunavut X0B 1J0

Via e-mail to:  
dirts@nunavutwaterboard.org

Dear Mr. Murdock:

**SUBJECT: Fisheries and Oceans Canada (DFO) Comments on the Nunavut Water Board (NWB) Preliminary Guidelines for Applicant – Cumberland Resources Ltd. – Meadowbank Project**

Thank you for the opportunity to review and comment on the preliminary guidelines prepared by the Nunavut Water Board (NWB) to assist the proponent of the Meadowbank Project in their application for a water license.

As you are aware, Fisheries and Oceans Canada (DFO) is the federal department responsible for the management of fish and fish habitat in Canada. DFO is also responsible for participating in Environmental Assessments conducted under the *Canadian Environmental Assessment Act* and Article 12 of the Nunavut Land Claims Agreement (NLCA), and for the provision of advice and expertise to the Nunavut Water Board (NWB) within the context of reviews conducted under Article 13 of the NLCA. Within the scope of our mandate and regulatory responsibilities we are happy to provide you with the following comments on the NWB Preliminary Guidelines for Applicant for the Meadowbank Project.

DFO understands that the NWB is anticipating a meeting with the proponent to undertake the development of the specifics related to Appendix A which would be attached to the general guidelines that have been circulated for our comment. In this regard, it should be noted that the Preliminary Guidelines that have been circulated in the absence of Appendix A are very general in nature and, in the opinion of DFO, do not provide sufficient detail to guide the development of an application by the proponent, or to allow DFO to be certain that we are providing the information the board is seeking following our review of the guidelines. However, DFO has endeavored to provide the NWB with as much detail as possible on what information we would need to conduct our review of the Meadowbank project relative to our mandate and subsequently inform the board of our conclusions. These comments are preliminary in nature and additional considerations may need to be included upon additional detail being provided through the development of Appendix A.

**Page 4**

**Section 2.0 – Guidelines for the Provision of Supplemental Information**

Generally, to mitigate potential impacts to fish and fish habitat, any works or undertakings associated with the Meadowbank Project that are in or near waters frequented by fish should:

- comply with the DFO legislation/policies/guidelines/Operational Statements as outlined below or noted within Section 3.0 of the Preliminary Guidelines for the Applicant.
- be done in manner that prevents the deposit of any materials in waters frequented by fish,
- comply with the DFO Freshwater Intake End-of-Pipe Fish Screen Guideline (March, 1995), to minimize impingement/entrainment of fish,
- Comply with the Guidelines for the Use of Explosives in or Near Canadian Fisheries Waters (Wright and Hopky, 1998), whenever possible
- ensure that hydrostatic testing be done in manner that prevents the transfer of aquatic species into water bodies where they do not currently frequent,
- ensure that groundwater is managed in a manner that prevents any seepage of hazardous waste materials into waters frequented by fish.

Site specific environmental data considerations for works in or near waters that are frequented by fish should include, but not be limited to:

1. Description of proposed works or undertakings (culvert crossing, bridge, intake, infilling pipeline, etc.)
2. Construction Plans:
  - a. proposed start and completion dates
  - b. methods of construction
  - c. detailed site description (incl. diagrams, photos)
  - d. details of materials and machinery to be used
  - e. a description of types and quantities of explosives to be used, if any
  - f. operation and maintenance plans
3. Fish and Fish Habitat Present:
  - a. detailed area description (incl. photos),
  - b. description of fish habitat (incl. river or lake bottom substrates such as silt, sand, or cobble),
  - c. presence of sensitive habitats (spawning, migration corridors etc.),
  - d. description of aquatic and riparian vegetation,
  - e. fish community and lifestage present,
  - f. depth and watercourse width,
  - g. max/min water flows, currents, tides,
  - h. turbidity and sediment loads (total suspended solids),
  - i. sport, commercial, subsistence fishery present,
4. Potential Environmental Effects and Mitigation Measures to Protect Fish Habitat
  - a. potential effects on fish or fish habitat,
  - b. area (in m<sup>2</sup>) to be impacted,
  - c. measures to avoid sensitive periods and habitat areas (i.e., spawning beds, migration corridors),
  - d. measures to avoid physical impacts on habitat,
  - e. measures to maintain flows and fish passage,
  - f. measures to avoid sedimentation,
  - g. measures to avoid spills (spill contingency plan),
5. Compensation/Monitoring:
  - a. Detailed habitat no-net-loss plan and site restoration plan,
  - b. on site construction monitoring plan,
  - c. post construction monitoring plan,
  - d. contingency plans.

**Page 9**

**Section 3.0 - Additional Documents to Assist in the Applicant**

Please note some of the DFO documents listed in this section are no longer valid or have not been referenced correctly. The following is a revised list of DFO documents to assist the proponent in the development of supplemental information:

The following references should be removed from the list of documents to assist the applicant as they are no longer valid:

DFO – Decision Framework for the Determination and Authorization of Harmful Alteration, Disruption or Destruction of Fish Habitat; and  
DFO – Policy on the Management of Fish Habitat and Habitat Conservation and Protection Guidelines;

The following should be added to the list of documents to assist the applicant:

DFO - Guidelines for the Use of Explosives in or near Canadian Fisheries Waters,  
DFO – Practitioners Guide to the Risk Management Framework (located at: [http://www.dfo-mpo.gc.ca/oceans-habitat/habitat/policies-politique/operating-operation/risk-risques/index\\_e.asp](http://www.dfo-mpo.gc.ca/oceans-habitat/habitat/policies-politique/operating-operation/risk-risques/index_e.asp))  
DFO – Practitioners Guide to Habitat Compensation (located at: [http://www.dfo-mpo.gc.ca/oceans-habitat/habitat/policies-politique/operating-operation/compensation/index\\_e.asp](http://www.dfo-mpo.gc.ca/oceans-habitat/habitat/policies-politique/operating-operation/compensation/index_e.asp))  
DFO – Operational Statements (located at: [http://www.dfo-mpo.gc.ca/regions/central/habitat/os-eo/prov-terr/nu/index\\_e.htm](http://www.dfo-mpo.gc.ca/regions/central/habitat/os-eo/prov-terr/nu/index_e.htm))  
JC - Species at Risk Act - including listed aquatic species for which the Minister of Fisheries and Oceans (DFO) is the competent minister.

DFO would add that fish and fish habitat should be assessed relative to the definitions of fish and fish habitat provided in the Fisheries Act. Namely that fish includes: “parts of fish, shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans of marine animals, and the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals”. Fish Habitat means: spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.

We trust that our comments are of assistance to the NWB in finalizing your guidelines document. If you have questions relating to the comments provided, please contact me at 867-979-8007.

Regards,

***Original Signed By:***

Tania Gordanier  
Habitat Management Biologist  
Fisheries & Oceans Canada  
Eastern Arctic Area

Copy: Keith Pelley, Area Director, Eastern Arctic Area