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*Via email:* pmercredi@mveirb.nt.ca

**Subject: Review of Draft Terms of Reference and Work Plan for the Environmental Assessment of Tyhee NWT Corp.'s Yellowknife Gold Project**

Your January 30, 2009 letter invited interested parties to evaluate the draft Terms of Reference and Workplan for the proposed Tyhee NWT Corp.'s Yellowknife Gold Project. Natural Resources Canada regulates the manufacture and storage of explosives through licensing under section 7 of the *Explosives Act*, and has reviewed the Terms of Reference from that perspective.

Based on the information presented, we are not certain whether the proponent intends to apply to NRCan for either a factory to make explosives or for magazines to store explosives at or near the site. If the proponent identifies a need for either or both of these facilities through the Developers Assessment Report, we have provided Attachment A to this letter to describe the information we would expect to be included to assess their effects on the environment.

We would also like to advise the board that, in keeping with NRCan's mandate to enhance the responsible development and use of Canada's natural resources, NRCan maintains science and technology expertise in a number of areas, including minerals and metals science and geosciences, that may be relevant in the technical review of the project's Developers Assessment Report. Attachment B to this letter lists these areas of expertise. Should that the Board believe that it requires NRCan's technical expertise in reviewing aspects of the Developers Assessment Report related to one or more of these areas, we would ask that the board advise us of such a request as early as possible, so that we can endeavor to have expertise available when necessary.

If you have any questions concerning our comments, or if I may be of further assistance please do not hesitate to call me at (613) 943-0773.

Sincerely,

John Clarke  
Regional Team Leader

cc: Rob Johnstone, MMS; Margo Burgess, ESS  
Attachments (2)



## Attachment A

### Describing the environmental effects of facilities licensed under the *Explosives Act*

- Explosives to be manufactured (typically ammonium nitrate fuel oil (ANFO) and/or emulsion/watergel). Note that if the proponent initially specifies ANFO and decides to add emulsion as the project proposal is further developed, the potential environmental effects of the project are not likely to be affected, as effluents and other aspects relevant to the assessment will not change.
- Maximum quantity of explosives at each facility.
- Infrastructures for manufacturing or storing explosives should be identified and include: explosives and initiation systems magazines, fuel storage, ammonium nitrate storage, maintenance/wash area, process vehicles and their parking area, any offices, warehouses, buildings, etc.
- Specified location (i.e., detailed site plan) of the various components of the facilities, with distances to vulnerable features such as dwellings, roads, camps, railways, bodies of water, etc. The proponent needs to demonstrate that safety distances required by the Explosives Regulatory Division (ERD) of NRCan have been considered and met.
- Fuel and ammonium nitrate storage plans. Storage of ammonium nitrate is to be in conformance with ERD guidelines.
- Liquid effluent disposal plans.
- Evaluation of worst case scenario (i.e. accidental explosion)
- Spill contingency plans.
- Details on any temporary explosive facilities to be used for starting the project must be provided, giving the same information requirements above. The temporary installations are often required before the other facilities can be put in place and as such are often more problematic for location, containment, etc.

Please refer to the NRCan Explosives Regulatory Division website for information on licensing, minimum distance requirements, etc, at <http://www.nrcan-rncan.gc.ca/mms-smm/expl-expl/erd-dre-eng.htm>.



## Attachment B

### NRCan's Areas of Expertise

#### General Information

- National and international energy, forestry and mining policies

#### Forestry

- Management of forests on Aboriginal and military lands;
- Ecology and forest ecosystems;
- Forest biodiversity;
- Biotechnologies;
- Climate Change;
- Entomology;
- Landscape and visual aspect;
- Forest fires;
- Pathology of forestry practices;
- Silviculture and regeneration;
- Socio-economics.

#### Mine and Metals

- Explosives;
- Management of mine wastes (sludge, tailings and overburden), protection of surface water and underground water quality
- Acid mine drainage and metal leaching
- Geochemistry

#### Energy

- Energy efficiency, new fuels;
- Energy technologies;
- Economic analysis for energy projects.

#### Earth Sciences

- Geographic Information systems;
- Geological incidents (earthquakes/seismicity, landslides, flooding, deep water hazard, tsunamis, geomagnetism);
- Geomatics;
- Geophysics (shallow terrain and deep crustal);
- Geosciences (surface and underground geology, geomorphology, underground water);
- Geotechnics and engineering geology;
- Permafrost occurrence, processes and stability;
- Glaciology;
- Groundwater and hydrogeology (flow, recharge, chemistry and aquifer delineation);



Natural Resources  
Canada

Ressources naturelles  
Canada

- Landscape process and stability (coastal, fluvial aeolian slope) and their response to climate change;
- Marine environmental and marine resource geosciences;
- Mineral and hydrocarbon geology and regional resource assessments;
- Remote sensing;
- Surveys on federal lands.