



Thursday, May 14, 2009

NRCan File #

Alan Ehrlich
Mackenzie Valley Environmental Impact Review Board
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Yellowknife, NT. X1A 2N7

By email: aehrlich@reviewboard.ca

Re: Submission from Natural Resources Canada for the scoping phase of the proposed Fortune Minerals NICO project

This letter is in response to the Mackenzie Valley Environmental Impact Review Board's April 2, 2009 "Outline and Instructions for Scoping Phase of the Environmental Assessment of Fortune Minerals NICO Project" (EA0809-004). In that letter, the Review Board asked interested parties to submit comments which would, in part, focus the subsequent environmental assessment on appropriate issues and confirm determine the level of effort required by all parties.

Natural Resources Canada (NRCan) recognizes, at this phase of the environmental assessment, that the department may be a Responsible Minister under the *Mackenzie Valley Resource Management Act* (MVRMA) for the Fortune Minerals NICO project. Specifically, the NICO Project "Project Description Summary" indicates that facilities and service systems related to ammonium nitrate storage and ammonium nitrate / fuel oil (ANFO) production will be constructed in association with the proposed mining activities.

These activities likely require an explosives factory licence under paragraph 7(1)(a) of the *Explosives Act*, administered by NRCan. To confirm this information, we will provide a questionnaire to the proponent asking them to describe their plans for the manufacture and storage of explosives.

If the project does require the on-site manufacture and storage of explosives, NRCan expects that these works and activities would be considered in the environmental assessment. Our recommended basic requirements for assessing an explosives factory in an environmental assessment are as follows:

- Description of the explosives to be manufactured (typically ammonium nitrate fuel oil (ANFO) or emulsion / watergel) and the maximum quantity of explosives at each facility
- Specified location, with distances to vulnerable features such as dwellings, roads, camps, etc. The proponent needs to demonstrate that safety distances required by NRCan's Explosives Regulatory Division have been considered and met.



Explosive magazines and ammonium nitrate storage locations must also be specified

- Fuel and ammonium nitrate storage plans. Storage of ammonium nitrate in conformance with NRCan's Explosives Regulatory Division guidelines.
- Liquid effluent disposal plans and spill contingency plans
- Environmental effects and evaluation of worst case accidents and malfunction scenarios, e.g. accidental explosion.

Any temporary explosive facilities to be used for starting the project must be included, giving the same information described above.

In addition to NRCan's regulatory responsibilities under the *Explosives Act*, the department may have other specialist and expert information and knowledge that it may be able to provide to the Review Board. The attachment to this letter provides a description of these areas of expertise. Any request for expertise can be made through the undersigned.

If you have any questions regarding NRCan's submission, please do not hesitate to contact me. I can be reached at (613) 943-0773, or by e-mail at John.Clarke@NRCan.gc.ca.

Sincerely,

John Clarke
Regional Team Leader
Natural Resources Canada – SPI

cc: Rob Johnstone NRCan – MMS



Attachment

NRCAN Areas of Scientific and Technical Expertise Relevant to Environmental Assessments of Mines

General Information

- National and international mining policies.

Mines and Metals

- Explosives;
- Management of mine wastes (tailings and overburden), protection of surface water and underground water quality, acid mine drainage;
- Development of mining sites;

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);
- 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.