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Environnement Canada

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October 30th, 2008

Our file: 4702 011
Your file: EA0809-003

Paul Mercredi
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Mackenzie Valley Environmental Impact Review Board
P.O. Box 938
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Via email pmercredi@mveirb.ca

Re: Comments on Scoping of the Tyhee NWT Corp. Yellowknife Gold Project Environmental Assessment

Thank you for the opportunity to provide input to the Mackenzie Valley Environmental Impact Review Board (MVEIRB) regarding the scope of the proposed Tyhee NWT Corp Yellowknife Gold Project (YGP) Environmental Assessment (EA). Environment Canada (EC) is a Responsible Minister as defined under Part 5 of the *Mackenzie Valley Resource Management Act* (MVRMA) for this assessment, and will be providing specialist advice in relation to the protection and conservation of the environment pursuant to its mandated responsibilities for the enforcement of the *Canadian Environmental Protection Act* 1999, Section 36(3) of the *Fisheries Act* 1985, the *Metal Mining Effluent Regulations* 2002, *Migratory Birds Convention Act* 1994, and the *Species at Risk Act* (SARA).

The Project Description dated July 2008 provides a general outline of the project, and is lacking in detail in many areas. A much higher level of detail will be needed in the Developer's Assessment Report (DAR) to allow reviewers to assess the project, and to reduce the need for Information Requests. To that end, the DAR Terms of Reference may need to be fairly explicit. The 2005 Terms of Reference for the EA could provide a starting basis for the current EA, but should be expanded to include Nicholas Lake, and be more detailed in the following areas:

The project description section may need to be more explicit in outlining the expectations for level of detail for each component and waste source.

Effluent Quality:

EC recommends that ALL parameters of potential concern be evaluated and effects predicted and characterized. Modeling of concentrations in the receiving environment would be useful, and should include all sources, supernatant quality, discharge quality, and the mixing zone for a range of conditions. The discharge strategy should be discussed.

Wastewater treatment should be discussed in detail, with contingencies identified. A high level of detail will be required for the cyanide circuit, with alternatives presented in detail.

Ammonia source control will be important to plan for and implement, and modeling of ammonia will need to be done, taking into account cyanide degradation products.

Environmental Management System Plans:

The Project Description lists a number of plans which will provide key information with respect to operational practices and mitigation measures. These should be submitted with the DAR, and contain as much detail as possible.

Monitoring:

Aquatic monitoring will be required under several regulatory instruments, and the DAR should contain a monitoring framework which integrates these, and which demonstrates the proponent's ability to detect changes in the environment. The monitoring framework should discuss adequacy of baseline data, and outline how it will be used in future comparisons. The proponent needs to clearly demonstrate how they will characterize the full range of natural variability within the aquatic ecosystem prior to beginning construction.

Air quality monitoring should be discussed in the DAR, and include modeling results which will allow for informed monitoring to be done.

Climate data collection should be included in the Terms of Reference (ToR).

The ToR should include a section on effects of the environment on the project, which could cover such items as climate change, permafrost, issues with ice inclusion in tailings, for example.

Please do not hesitate to contact me with any questions or comments with regards to the foregoing at (867) 669-4735 or by email at anne.wilson@ec.gc.ca.

Yours truly,

Original signed by

Anne Wilson
Water Pollution Specialist
Environment Canada

cc: Carey Ogilvie, (Head, EA-North, Environment Canada, Yellowknife)
Myra Robertson (EA Coordinator, Canadian Wildlife Service, EC, Yellowknife)
Dave Fox (Air Quality Issues Specialist, EPOD, Yellowknife)