

Prairie and Northern Region Environmental Protection Operations Environmental Stewardship Branch

#200, 4999 98 Avenue NW Edmonton, Alberta T6B 2X3

February 7, 2011

Alan Ehrlich Environmental Assessment Officer Mackenzie Valley Review Board

Dear Mr. Alan Ehrlich:

Please find below Environment Canada's response to Alternative North IR #13 from Round 2 Information Requests on the Giant Mine Remediation Project EA (EA 0809-001).

Thank you.

Sincerely,

Amy Sparks

Contaminated Sites Officer Environment Canada

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> cc. Adrian Paradis, AANDC Giant Mine Remediation Team Tara Kramers, AANDC Giant Mine Remediation Team Dave Fox, Environment Canada Jane Fitzgerald, Environment Canada Paul Mercredi, Mackenzie Valley Review Board



www.ec.gc.ca



EA No: 0809-02

Information Request Number: Alternatives North IR #13

Preamble

Environment Canada retains a mandate and expertise with regard to air quality. The above Information Requests resulted in a significant amount of data and information on air quality predictions and effects analysis.

Request

1. What did Environment Canada do with the data and information provided in the response to its IRs 12, 13 and 14?

2. Has Environment Canada conducted a review or assessment of the air quality predictions in the DAR? If so, please provide a copy.

Response:

- EC met with the Proponent (Oct. 11) to discuss the supplemental information provided in response to EC IRs 12, 13 and 14. The supplemental information was satisfactory but EC presented concerns with the ambient quality predictions provided in Table 1 of the supplemental information response for EC IR 14. The model predictions presented in Table 1 included exceedances of ambient air quality standards. EC recognized that a screening model, ISC, was used to predict ambient air quality concentrations resulting from air emissions at the mine site as well as air emissions from the Jackfish Power Plant at full power generation (30MW), and that screening models tend to be conservative so are used as a first step in the air assessment process. Typically, if predictions from a screening model exceed ambient air quality standards, a refined model is used to simulate more realistic conditions. As such, in follow-up correspondence with the Proponent, EC requested that the Proponent complete a new simulation using a refined model, CALPUFF. EC understands that the refined modeling is currently underway with results pending.
- 2) EC reviewed the air quality predictions in the DAR and presented comments through EC IRs 12, 13, and 14. EC will also review the new air quality modelling predictions when available. Review and assessment comments on the DAR and the new modelling results will be included in the EC intervention to MVEIRB, if required.

