



# Giant Mine Environmental Assessment

## IR Response

Round One: Information Request Yellowknives Dene First Nation #22

June 17, 2011

### INFORMATION REQUEST RESPONSE

**EA No: 0809-001**

**Information Request No: YKDFN #22**

**Date Received**

February 28, 2011

**Date of this Response**

June 17, 2011

**Request**

***Preamble:***

Community perceptions of environmental health is something of a general statement, especially as the project seems to focus on simply reducing risk rather than making the site part of the greater ecosystem.

***Question:***

INAC should be directed to provide criteria on how they intend to evaluate this and explain what their targets and adaptive management criteria are.

**Reference to DAR (relevant DAR Sections)**

8.10.1 Evaluation Criteria

**Reference to the EA Terms of Reference**

3.4.3 Cultural Impacts

**Summary**

During consultations conducted to date by the Giant Mine Remediation Project Team (Project Team), participants have communicated their perceptions of current environmental quality in the vicinity of the former Giant Mine. The Developer's Assessment Report (DAR) concludes that the Giant Mine Remediation Project (Remediation Project) will result in an overall improvement of environmental quality. However, this does not imply there will be a commensurate shift in how the environment is perceived and used by local communities. Additional consultation and community participation in the design of the Remediation Project and Environmental Monitoring and Evaluation Framework (EMEF) is required to measure community perceptions regarding the environment and success of the Remediation Project.





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During consultations conducted to date, participants have communicated their perceptions of current environmental quality in the vicinity of the former Giant Mine. In particular, concerns have been expressed that site contamination is having an adverse effect on the biophysical environment. By extension, perceptions of current environmental quality are resulting in changes to the ability and/or willingness of local residents to use the land and waters surrounding Giant Mine.

By mitigating existing environmental risks associated with the Giant Mine, the Remediation Project will result in important improvements to environmental quality. Although full restoration of the environment to a pre-mining condition is not possible, the DAR predicts that important improvements in environmental quality will be achieved. For example, the Human Health and Ecological Risk Assessment (Section 8.9 of the DAR) concluded that, once remediated, the site is anticipated to have minimal effects on the health of people and animals. On this basis, improvements achieved by the Remediation Project such as reduced arsenic loadings to the aquatic environment and management of surface contamination will play an important role in efforts to improve the health of the ecosystem. A summary of these and other benefits is provided in Table ES.2.1 of the DAR.

The conclusion that the Remediation Project will result in an overall improvement of environmental quality is based on scientific evidence. However, this does not imply there will be a commensurate shift in how the environment is perceived and used by local communities. In an effort to promote a greater degree of alignment between the outcomes of the Remediation Project and community perceptions, a variety of initiatives have been proposed, including:

- Additional consultation on the conclusions reached in the DAR;
- Community participation in the detailed design process, particularly those elements that have the potential to affect future land-use (e.g., tailings covers, remediation of Baker Creek);
- Consultation in the design of the EMEF;
- Community participation in implementation of the EMEF throughout the life of the Project; and
- Communication of monitoring results and community participation in any adaptive management initiatives that may be required.

As described in Chapter 14 of the DAR, the EMEF will play a central role in monitoring the health of the environment during and after remediation. In addition to collecting scientific evidence, the EMEF will endeavour to measure community perceptions regarding the environment and how such perceptions might be affected by the Remediation Project. The approaches that are used to measure community perceptions should be informed by community input. The Project Team proposes to obtain this input during the design phase of the EMEF. As a starting point, the following table of potential criteria and indicators has been prepared. The table has been modified from “Table D Common Valued Components, Criteria and Indicators” in Appendix D of the Review Board’s *Socio-Economic Impact Assessment Guidelines* (Review Board 2007). These proposed metrics will be modified based on community input received prior to finalization of the EMEF.





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**Table 1: Potential Valued Components, Criteria and Indicators for Giant Mine Remediation Project – Community Perceptions**

Valued Component <sup>1</sup>	Criteria	Indicator	Meaning and Potential Value	Source
Aboriginal Interests	Attitudes toward Remediation Project	Changing perceptions about the quality of Yellowknife Bay, Back Bay and Baker Creek	Willingness of community members to engage in practices that relate to the aquatic environment (e.g., fishing, boating).	Public Meetings Interviews Focus Groups
		Changing perceptions about the quality of the terrestrial environment within the Site and Local Study Areas.	Willingness of community members to engage in practices that relate to the terrestrial environment (e.g., berry picking).	Public Meetings Interviews Focus Groups
		Trust in Project Team (INAC, PWGSC and GNWT)	Belief in ability of Project Team to successfully implement the Remediation Project	Interviews Surveys Public Meetings
		Changing perceptions about quality of Yellowknife Bay, Back Bay and Baker Creek	Ability of First Nations to access and understand Monitoring data from Remediation Project	Interviews Surveys Public Meetings
	Maintenance of Traditional Culture	Percentage of population that hunts, fishes, traps for sustenance within the Regional Study Area.	Related to diet, but also culture and physical well-being	Interviews Surveys Public Meetings

Note: Table has been modified from Table D Common Valued Components, Criteria and Indicator for SEIA, Appendix D of the *Socio-Economic Impact Assessment Guidelines* Mackenzie Valley Environmental Impact Review Board, March, 2007

<sup>1</sup> Defined in the Giant Mine Remediation Project Developer's Assessment Report, EA0809-001 of October, 2010, as "physical, biological, cultural, and economic aspects of the environment that are considered important by society."