



## **Environmental Management System Update Meeting with Parties – 5 March 2012**

17 April 2012



# Giant Mine Environmental Assessment

EA No. 0809-001

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## Meeting Summary

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### 1. INTRODUCTION

Giant Mine Remediation Project (GMRP) Team organized a meeting with the Interested Parties. The meeting was held in the 1<sup>st</sup> Floor Boardroom of the Waldron Building in Yellowknife, 5 March 2012 from 1:00 to 5:00 pm.

The PowerPoint presentation used by the Project Team is provided in Appendix A. Meeting participants included members of the GMRP as well as representatives from the interested parties:

Giant Mine Remediation Project Team	Team Member
Aboriginal Affairs and Northern Development Canada (AANDC)	Adrian Paradis
	Octavio Melo
	George Lafferty
Government of the Northwest Territories – Environment and Natural Resources (GNWT-ENR)	Erika Nyyssonen
Public Works and Government Services Canada (PWGSC)	Mark Palmer
	Lisa Dyer
	Dave Abernethy
	Nathaniel Pahl
GMRP Interested Party	Representative
Mackenzie Valley Land and Water Board	Kathleen Graham
Environment Canada	Jane Fitzgerald
Fisheries and Oceans Canada	Morag McPherson
Alternatives North	Kevin O'Reilly
Yellowknives Dene First Nation	Todd Slack

\*Notes were taken by Krista Amey, DPRA.

Lisa Dyer (PWGSC) provided an overview of the meeting's agenda and initiated roundtable introductions. Adrian Paradis (AANDC) presented the purpose and objectives of the meeting.

### PURPOSE OF THE MEETING

The purpose of this meeting was to provide an informal update on the current activities of the Giant Mine Remediation Project team on the Environmental Management System (EMS) and seek feedback from interested parties to inform both content and process for the further development of the EMS.

### OBJECTIVES

The objectives of this meeting:

- To communicate the overall approach for development and implementation of the EMS
- To provide an update to GMRP parties on progress in design and development of EMS



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- To seek feedback on the approach and suggestions for appropriate times and means for engagement with interested parties

This report provides a summary of this meeting and will be uploaded to the Review Board registry along with the presentation deck and the draft policy.

## 2. GMRP EMS, AND CONCEPT & APPROACH TO EMS DEVELOPMENT

Mark Palmer (PWGSC) provided an overview of what was said at the October 2011 Technical Sessions and what the GMRP team has accomplished since then.

### GAP ANALYSIS

Kevin O'Reilly (Alternatives North) posed a number of questions, seeking clarification on the completion and availability of gap analysis.

Mark and Erika clarified that the draft Gap Analysis of the overall EMS is complete and follows ISO standard 14001. The gap analyses for the individual Environmental Management Plans (EMPs) will not be finalized until after a meeting with the design team, which will be taking place starting next week. The overall gap analysis is in draft form and should be available by the end of March. The gap analysis for the EMPs will take longer. Erika committed to circulate the gap analysis when it is completed in the next couple of weeks.

### ISO 14001 CERTIFICATION

Kevin asked why the Giant Mine Remediation Project team is not seeking ISO 14001 Certification. Octavio Melo (AANDC) stated that there are no plans to register the EMS at this time. The plan is to design and operate the EMS conforming to ISO standard 14001. The cost of registration is of the order of \$10,000 for a regular registration audit by an ISO auditor.

Kevin pointed out that \$10,000 is very little given the scale of this project and as such, Alternatives North recommends that ISO certification be obtained. ISO certification provides external verification and helps to build public confidence in proper environmental management of Giant Mine.

### TIMEFRAME OF THE EMS

Kevin asked at what stage in its development the EMS will be in by the end of the EA process. This question was not answered at this point; the Project Team stated that it will be revisited later in the meeting.



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### 3. DRAFT EHSC POLICY

Octavio provided an introduction to the GMRP EMS and an overview of the draft Environment, Health, Safety and Community (EHSC) Policy. During this time, Octavio stated that the policy is a requirement under ISO and emphasised its importance as a statement of commitment from Senior Management and direction to the project execution team. It was indicated that comments and feedback from the interested parties on the draft EHSC Policy would be valuable and asked that any feedback be submitted by the end of March 2012 to Adrian Paradis, who will distribute within the Project Team accordingly.

#### INITIAL COMMENTS ON THE POLICY

Kevin pointed out, regarding the second bullet under the objectives of the remediation plan (draft EHSC Policy), that remediation to Industrial Use may not be appropriate and that there has been talk of remediating the Townsite to a higher standard based on the City's existing and future plans for the area.

Kevin pointed out that "Transparency", identified as a Guiding Principle for the GMRP, could also be considered an objective or a value. It was felt that this could be presented more strongly as a statement of commitment to the community. He further stated that funding / capacity for participation is also important and has not been mentioned in the policy. This is an issue for Alternatives North and will be for other parties as well.

Kevin commented on the use of the term "Engagement" and "Consultation" are rather vague without a definition. He suggested that "Consultation" be used as it has a definition according to various land claims agreement and a defined set of requirements. He also suggested that the Guiding Principle of "Traditional Knowledge" should read "Traditional Knowledge will receive equal consideration...".

Kevin stated that there has been some interest by the GMRP team in periodic review of technology and as such, he would like to see some sort of acknowledgement or "reflection" of "ongoing research and development" (preferably funded). Further, he would like some sort of recognition that it is perpetual care – for example, that the Frozen Block is interim and not permanent and that there should be a plan to research a permanent solution.

As part of the policy, Kevin would like to see an organizational chart for the current management of the project and how it would look during construction and perpetual care. The relationships – who is where (location of the position) and how all relate would be very helpful.

Lisa thanked Kevin for his input and pointed out that some of the things that he brought up do not suit the policy document, which is more overarching, but would be more appropriate in other documents.

Morag McPherson (DFO) stated that although she doesn't know all of the background and associated documents, this policy document seems to default to the minimum requirements, whereas she was expecting to see the "how"s and doesn't see the extra steps or stretch goals and objectives. She would



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like to see principles like “we are committed to achieve best practices”, “continuing to gather fresh information” and “trying to achieve a certain bar”. Morag further suggested adding a principle regarding “technical and scientific soundness”.

### LOCAL ACCOUNTABILITY

Todd Slack (YKDFN) expressed concern regarding what he considers inadequate local accountability and implementation. Mark stated that the environmental monitoring plans will be local and Octavio said that roles and responsibilities will be discussed later in today’s meeting but they will be developed and documented more fully in the EMS.

Kevin stated that local accountability should be a core value. He provided an example – if someone drives by the site and they see something that they want to report. Who takes the initial call and what is the pathway it will take.

Todd is concerned because he is seeing more of a shift of control for the project to outside Yellowknife.

Lisa reiterated that this is a draft policy and that the team welcomes and will consider all comments and to please submit feedback ideally by the end of March, but mid-April would be fine.

## 4. KEY EMS ELEMENTS

Octavio provided an overview of the EMS Elements, describing, in broad-strokes, the processes of planning, implementation and operation, checking and corrective action and review, to determine if the EHSC objectives and targets as well as the overall policy requirements have been met. Octavio provided an overview of the roles and responsibilities associated with the EMS. Roles associated:

- Top Management Representative
- Environment, Health, Safety and Community “Manager”
- EMS Working Group (WG)
- Construction Manager
- Other operational-based roles managed by AANDC and PWGSC and Construction Manager

### EMS WORKING GROUP

It was noted that the process for implementing an EMS WG still needs to be finalized but the Project Team will work with others to implement the EMS.

Kevin requested details on the Project Leadership Committee. Who is on it? What are all of the bodies on the PLC? As for the Terms of Reference for the Working Group, there are some good ones, for example the Ekati Interim Closure and Reclamation Plan (ICRP) Working Group through the Mackenzie Valley Land and Water Board (and later, the Wek’eezhii Land and Water Board).



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Adrian added a caveat that the setting up of a Working Group has been project-driven but will at some point be transferred to the Land and Water Board process.

### CONSTRUCTION MANAGER

Todd sought clarification on the role of the Construction Manager.

Octavio explained that there are two types of monitoring:

1. Activity-related (i.e. building demolition)
  - Construction Manager
    - i. Established demolition methods and procedures
    - ii. Monitoring protocols specific to the demolition
2. Site-wide monitoring program (current program in place but future program yet to be determined)
  - Managed out of AANDC-Regional (currently conducted by Tara Kramers or Golder Associates)

Todd was concerned that the Construction Manager would be developing the requirements. Mark assured attendees that the Construction Manager would not be setting the requirements; AANDC will be setting the criteria, these would be reflected in contracts and the Construction Manager would develop standard operating procedures for achieving those contract requirements which the Crown would review.

Adrian offered the example of the demolition of the roaster complex and associated dust monitoring. The Standard Operating Procedures set out the permit conditions and the day-to-day implementation and associated roles and responsibilities. Long-term monitoring would be done by others (e.g. could be taken on by the community).

## 5. ENVIRONMENTAL MANAGEMENT PLANS

Erika Nyssonen (GNWT) presented an overview of the Environmental Management Plans, stating that they are developed during the planning phase and are the primary means of controlling, managing and monitoring environmental and health and safety risks. The development of the EMPs will follow the objectives-based approach of the MVEIRB/AANDC Draft Closure and Reclamation Guidelines and will be adapted from the structure and organization of the diamond mine ICRPs.

There was some confusion and discussion among the meeting attendees regarding the multiple uses of the term “component” by the Giant Team. For example, mine component versus environmental component. It was agreed that the term and the selection of associated goals, objectives and criteria related to each component and/or EMP need to be clarified to assist in moving these discussions



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forward, as such the term “component will be revisited, defined, cross-referenced with the DAR and used consistently. Adrian stated that any changes made will be well-documented. DFO further noted that either way it's approached, Baker Creek was not referenced in the list of remediation or mine components where EMPs will be developed (IR round 2 responses to Alternatives North IR#3 and ) and that fish and fish habitat was not identified for EMP development outlined in the DAR (Section 14.1.2).

There was also a discussion on the information provided in the responses to the second round of Information Requests (IRs) versus the information presented at this meeting. Todd pointed out that the information presented at this meeting was clearly well-developed and questions why this was not included in the IR Responses just two weeks ago. Adrian explained that there is a 6-8 week lag in information that can be made available and as such information provided in IR responses is a snapshot in time and that while information is being presented the WG continues to advance the process. Concern was communicated by Parties regarding the 6-8 week lag in information and how this affects/challenges their ability to provide relevant analysis and recommendations to the Board within the current EA process, if the information is out-dated and/or has changed. The GMRP Team acknowledged that the Parties would like to receive more current information.

Todd asked when the final EMP matrices would be available. Erika and Lisa said that the EMS team and the Designers will be meeting starting next week to address outstanding issues. Feedback from today will help in next week's meeting. Following the meeting with the EMS team and the designers, the draft will be finalized and then will be provided to the Parties for further input.

Kevin stated that there have been noticeable improvements since the DAR but would also like to point out that this is the first time in 11 years that he feels that he is being invited to provide input without decisions having already been made.

Kevin indicated that the Parties need to know the certainty around the closure objectives, criteria and options: What are the closure objectives? What is the purpose? What are the performance criteria? What are the measureable criteria that the AANDC inspectors and the community use at the end of the day to determine whether the project has been successfully remediated? What are the options? What are the timelines of the design work? What is the cost? Where there is uncertainty around any of these points, there should be a clear reclamation research plan and/or engineering plan that lays out the tasks yet to be done, how long they will take and what the cost is likely to be. The sooner the research or design work is to be carried out, the greater the level of detail that should be spelled out. Such a framework is likely to make reporting much easier too.

Todd stated that it is the responsibility of the Project to provide clarity for the inspectors.





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### 6. IMPLEMENTATION PLAN

Octavio gave a synopsis of the plan for implementing the EMS, which is being led by the Management Board (MB) and the PLC and will be based on the results of the Gap Analysis and stakeholder engagement. A timeline for EMS implementation was provided.

#### IR DISCUSSION

Kevin and Todd were not happy about the responses provided by AANDC to the second round of Information Requests. They had particular concern expressed about the Roaster Complex demolition. Specifically, they questioned why it was not presented at the Technical Session in October as an emergency and that it was mentioned in the responses to Round 2 of the IRs and is now being considered an emergency. They strongly voiced concern and questioned the potential omission of the Roaster Complex demolition from the EA, given that it is one of the most contaminated places at the mine site. They are seeking clarity on why the Roaster is an emergency. They also indicated that they are more concerned about closure criteria for the Frozen Block method and that this should be a priority for the EMS.

Todd and Kevin stated that engagement on the EMPs is very important, to start with the Frozen Block mine element as top priority. Input has already been received from the parties to the EA on what measures and targets might be appropriate to consider (temperature within the 10 m shell, temperature within the dust, carrying out 3-dimensional modelling, etc.). Also, the project team needs to provide resources to parties like YKDFN and AN, via contribution agreements, to ensure they can participate and provide meaningful input.

Morag noted that there should be another meeting soon to clarify the direction, main components, and criteria of the working group. As mentioned earlier in the meeting, the WG Terms of Reference (ToR) developed as part of the BHP project, could serve as a very good foundation.

Todd reiterated concern over the ice thickness issue and the diffuser as well as the town site and the City of Yellowknife's intended use vs. the GMRP's understanding or intentions (criteria issue). There needs to be further dialogue with the City regarding their plan for the site and all associated costs.

Kevin admitted that the tone in the responses to the second round of IRs was much more professional than those to round 1; however he stated unease over the partial or complete lack of answers in some cases. He further indicated concerns with the Site Stabilization Plan (SSP) and exemption of certain project components from the EA, such as the demolition of the Roaster Complex. Kevin clearly stated that this is not acceptable. He also closed by stating that Alternatives North may request another Technical Session to address unanswered questions or new information (e.g., Roaster).



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Kevin questioned the number of commitments, six were given in the response but he had identified many more.

It was pointed out that institutional land controls and subsurface withdrawal was not referenced.

It was questioned why a lot of information was presented at the Technical Sessions on the Baker Creek North Diversion but then it was withdrawn as an option.

Kevin, Todd and Morag shared concerns that the Public Hearing could be complicated and as such potentially delayed or made less effective as a result of unaddressed issues, which will surface at the Public Hearing. The Public Hearing should be used to clarify direction and planning going forward.

### 7. CLOSING REMARKS

Lisa thanked everyone who attended, stating that a lot of very good information came out of the meeting and that further feedback regarding the EHSC Policy would be very beneficial. The GMRP Team would appreciate receiving feedback on the policy by mid-April. These meetings are good, allowing continued sharing of information, which will better the content and process for the further development of the EMS.



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## **APPENDIX A – ENVIRONMENTAL MANAGEMENT SYSTEM UPDATE – POWERPOINT PRESENTATION**



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## **APPENDIX B – DRAFT GMRP ENVIRONMENT, HEALTH, SAFETY AND COMMUNITY POLICY**



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*March 2, 2012 DRAFT*

## **GIANT MINE REMEDIATION PROJECT**

### **ENVIRONMENT, HEALTH, SAFETY AND COMMUNITY POLICY**

#### **PREAMBLE**

This policy has been developed to integrate and synthesize relevant environment, health, safety and community policy direction and commitments related to the Giant Mine Remediation Project including: Treasury Board Policy, AANDC Sustainable Development Strategy, AANDC Contaminated Sites Management and Environment, Health and Safety Management Policies, the Cooperation Agreement concerning the Giant Mine Remediation Project between AANDC and GNWT, the Giant Mine Remediation Plan and the Developers Assessment Report.

#### **PURPOSE**

This policy is intended to provide guidance for the management of the Giant Mine Remediation Project in order to achieve the project objectives.

#### **SCOPE**

The scope of this policy includes all of the activities required to achieve the environment, health, safety and community objectives of the project throughout all phases including design, construction, adaptation and long term care and monitoring.

#### **OBJECTIVES**

The overall objectives of the Giant Mine Remediation Project are to:

- Minimize risks to human health and safety;
- Minimize impacts to the environment; and
- In the process, reduce Canada's liability<sup>i</sup>.

The objectives of the remediation plan are to:

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- Manage the underground arsenic trioxide dust in a manner that will minimize the release of arsenic to the surrounding environment, minimize public and worker health and safety risks during implementation, and be cost effective and robust over the long-term;
- Remediate the surface of the site to the industrial use guidelines under the NWT Environmental Protection Act, recognizing that portions of the site will be suitable for other land uses with appropriate restrictions;
- Minimize public and worker health and safety risks associated with buildings, mine openings and other physical hazards at the site;
- Minimize the release of contaminants from the site to the surrounding environment; and
- Restore Baker Creek to a condition that is as productive as possible, given the constraints of hydrology and climate.

### GUIDING PRINCIPLES

In order to meet the above objectives, the Giant Mine Remediation Project will apply the following principles:

1. **Engagement:** Interested parties will be actively engaged in the design and implementation of the project.
2. **Traditional Knowledge:** Traditional knowledge will be considered and used alongside scientific information in the design and monitoring of the project.
3. **Transparency:** Data, information and reports will be publicly available and produced and shared in a timely manner. Governance structures and processes associated with monitoring and evaluation will be transparent and include mechanisms for third-party review.
4. **Adaptive Management:** The project and its monitoring and evaluation framework will have the ability to change and improve in response to new knowledge, needs and circumstances.
5. **Accountability:** Roles and responsibilities will be clearly defined and understood by all parties.

### REQUIREMENTS

The following requirements will be integrated into the design, implementation and monitoring of the project:

- The project will comply with all applicable federal, territorial and municipal legal obligations, regulatory requirements and policy requirements.
  - The project will promote the social and economic benefits that may accrue to First Nations northerners through implementation of the project.
  - The project will establish and maintain an Environmental Management System (EMS) to implement requirements of this policy:
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- The EMS will be consistent with the internationally recognized standard ISO 14001 and will describe a systematic approach to manage environmental aspects across all activities and monitoring;
- Environmental Management Plans will be developed and implemented to address the environmental and social objectives, targets, and commitments of AANDC and the GNWT with respect to the Remediation Project components.
- The EMS will require external reporting through the following means:
  - Quarterly reporting;
  - Annual Reports to summarize and review all operational and environmental data collected in the one-year reporting period; and
  - Status of the Environment Reports – prepared every three years during the initial 15-year remediation period and every five years thereafter, to summarize, review and interpret the data collected and to provide recommendations for modifications to the monitoring program or site operations.
- An audit protocol, including third-party auditing, and a review process will be an integral part of the EMS.
- Adaptive management will be incorporated into the project through the following measures:
  - Proactive monitoring to detect changing conditions in areas of expected uncertainty within a time frame that allows effective response;
  - Clear triggers that will ensure timely implementation of effective responses; and
  - Appropriate measures that can be undertaken to address unacceptable conditions or performance.

## ACCOUNTABILITY

Overall accountability for the implementation of this policy rests with the Project Leader, the Assistant Deputy Minister of the Northern Affairs Organization. This policy is endorsed and approved by members of the Giant Mine Oversight Committee. Specific responsibilities related to the implementation of the policy will be detailed in the EMS and other project governance and management systems.

## REFERENCES

1. Policy Framework for the Management of Assets and Acquired Services (TBS Assets and Acquired Services, 2006)
2. AANDC Sustainable Development Strategy
3. AANDC Contaminated Sites Management Policy
4. AANDC CSP Environment, Health and Safety Management Policy
5. Cooperation Agreement concerning the Giant Mine Remediation Project between AANDC and GNWT



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6. Giant Mine Remediation Plan
7. Developers Assessment Report

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<sup>i</sup> As defined in Treasury Board Policy.