

Initial Workplan

For

Environmental Assessment 0809-001 Giant Mine Remediation

Proposed by

Contaminants & Remediation Directorate – Indian and Northern Affairs

Mackenzie Valley Environmental Impact Review Board

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TABLE OF CONTENTS

1 I	INTRODUCTION	3
2 A	APPROACH	3
3 8	SCOPE OF DEVELOPMENT	4
4 5	SCOPE OF ASSESSMENT	5
5 I	ROLES AND RESPONSIBILITIES	6
5.1	REVIEW BOARD	6
5.2	REVIEW BOARD STAFF	6
5.3	Developer	6
5.4	GOVERNMENT BODIES	6
5.5	OTHER PARTIES	7
6 1	EA START-UP AND SCOPING SCHEDULE	S
6.1		10
6.2	SCOPING PHASE DECISIONS	10

1 INTRODUCTION

On April 2, 2008, the City of Yellowknife referred the Giant Mine Remediation Plan to environmental assessment (EA). The proposed plan involves the reclamation of an abandoned gold mine and the containment and immobilization of 237,000 tonnes of arsenic trioxide, a byproduct of the gold production process. Giant Mine was in production for close to 60 years under two different owners; the property is now Commissioner's Land and is administered by the Department of Municipal & Community Affairs (GNWT). Care and maintenance of the site is provided by Indian and Northern Affairs Canada's Contaminants and Remediation Directorate.

This environmental assessment is subject to the requirements of Part 5 of the *Mackenzie Valley Resource Management Act (MVRMA)*. It is also subject to the Mackenzie Valley Environmental Impact Review Board's *Environmental Impact Assessment Guidelines* and the *Rules of Procedure*. The documents are available online at www.mveirb.nt.ca.

The definitions of *MVRMA* s. 111 apply in this document and throughout the EA. Terms not defined in the *MVRMA* are used in their general sense and do not imply specific activities or standards that may be associated with the term in other jurisdictions.

2 APPROACH

This EA is divided into five broad phases:

- 1. The **Start-up phase** includes the creation of the basic administrative structure of the EA, such as setting up the public registry, sending out notifications to interested parties and public advertisement of the EA.
- 2. The **Scoping phase** is an opportunity for the Review Board to identify and prioritize key issues in the EA. This phase will consist of scoping sessions, a scoping hearing and the production of an EA Terms of Reference.
- 3. The **Analytical phase** includes gathering information about potential impacts to the environment as considered in the Developer's Assessment Report and information requests. Further impact prediction and analysis will occur through technical meetings and the drafting of technical reports.
- 4. The **Hearing phase** will include a pre-hearing conference and public hearing(s), which will allow the Review Board to directly hear evidence first-hand.
- 5. The **Decision phase** will include the Review Board's decision under *MVRMA* section 118 (or section 134 for an EIR). This phase concludes when the Review Board submits its Report of Environmental Assessment to the Minister.

This work plan will focus primarily on the initial phases of the EA. The components of phases 3 through 5 of the EA will be largely determined by the results of Phase 2, so only a broad overview of timelines will be provided for the later phases.

This EA will include a scoping hearing, which is a higher level of scrutiny at an initial stage of the

EA than is commonly used by the Review Board. The nature of this development, meaning the potential severity and scale of the adverse impacts and its close proximity to a large community, necessitate a more thorough and careful examination by the Review Board. The intended aim of scoping is to:

- (a) Identify and prioritize the key issues for this assessment;
- (b) Gather evidence of potential adverse environmental impacts related to the proposed development;
- (c) Gauge the amount of public concern in the community that is related to the proposed development;
- (d) Subject to (b) and (c) above, determine whether issues should be assessed in an environmental assessment or an environmental impact review.

If the Review Board determines that the proposed development warrants an environmental impact review, then the Review Board may choose to refer the development to Environmental Impact Review under *MVRMA* section 128(1)(b)(i) or section 128(1)(c). Should this occur the process from that referral onwards would be similar to that of an environmental assessment, although it would be conducted by a panel established by the Review Board.

The Review Board will conduct an informal scoping session to give interested groups and individuals an opportunity to discuss the project and to help identify and clarify the issues that they intend to present to the Review Board at the scoping hearing. This session is intended to be open to all members of the community, including representatives from government and NGOs.

3 SCOPE OF DEVELOPMENT

The MVEIRB has defined the scope of development to consist of, but not be limited to, the following physical works or activities that will occur during implementation of the Remediation Plan:

Surface Remediation

- Removal and/or covering of tailings ponds and other contaminated soils and materials
- Disposal of tailings and contaminated soils
- Removal and rehabilitation of buildings, roads and other infrastructure, including quarries and borrow pits
- Backfilling of some open pits and capping adits
- Rehabilitations of Baker Creek
- Treatment and discharge of contaminated water
- Waste storage and disposal
- Relocation of a section of the Ingraham Trail to facilitate remediation work

Underground Remediation

• Clean-up of underground infrastructure

- Containment of arsenic trioxide stored in chambers under Giant Mine using the frozen ground method
- Stabilization of structures and underground chambers
- Treatment of mine water contaminated by other sources of arsenic underground

Monitoring Program

- Ongoing management of the frozen ground to prevent failure of the arsenic trioxide containment system
- Monitoring surface, ground and mine water contamination and ongoing treatment
- Monitoring of other environmental components, such as atmospheric conditions, environmental effects and physical workings, and regular inspections of the site.

Some of the components of this development have a definite temporal scope, namely those that deal with surface clean up or underground structural remediation work. However, the Review Board assumes that the temporal scope for the arsenic containment system and associated monitoring activities has no definable end point.

4 SCOPE OF ASSESSMENT

The scope of this assessment includes the consideration of all components of the proposed development as cited above.

According to the *MVRMA*'s definition of an 'impact on the environment', this EA will examine impacts on the biophysical environment, such as water, air and wildlife, as well as direct and indirect impacts on wildlife harvesting and cultural, social and heritage resources. To do this, the Review Board will consider both environmental and socio-economic impacts that may be caused by the proposed development.

Generally when referring to the "Giant Mine site", the Review Board adopts the developers definition of their project site, which includes the land under Reserve R662T (including the main workings of Giant Mine), the Giant Mine town site, the Yellowknife Marina and an area along the north shore of Yellowknife Bay where tailings have historically been discharged. It is assumed that some impacts to the environment may not be limited to the Giant Mine site, but will extend beyond the site. In these instances, the Review Board will assess impacts according to a geographic scope that is appropriate to the impact being assessed. For example, water bodies downstream of the site, including Back Bay, Yellowknife Bay and Great Slave Lake shall be considered if necessary.

In addition to potential impacts to the biophysical environment and human systems, this EA will look at the remediation plan in of itself, and its associated monitoring program, and the ability of these components to adequately protect the environment and local people from potential adverse impacts. The Review Board will consider both the potential of impacts today and the potential of impacts at some future time.

Cumulative impacts will also be considered, as per *MVRMA* s. 117 (2)(a). (Appendix H of the Review Board's *Environmental Impact Assessment Guidelines* provides additional guidance on cumulative effects assessment).

5 ROLES AND RESPONSIBILITIES

This section explains the roles and responsibilities of the Review Board, the Review Board's staff and other parties involved in the Environmental Assessment process.

For a more detailed treatment of roles and responsibilities in the Review Board's environmental impact assessments, please see sections three and four of the Review Board's *Environmental Impact Assessment Guidelines*.

5.1 Review Board

The Review Board's role includes the following in relation to this EA:

- Conduct the EA in accordance with ss.126(1) of the MVRMA;
- Determine the scope of the development, in accordance with ss.117 (1) of the MVRMA;
- Consider environmental assessment factors in accordance with ss.117 (2) of the MVRMA;
- Make a determination regarding the environmental impacts or public concern about the development, in accordance with ss.128 (1) of the MVRMA;
- Submit report to the Federal Minister in accordance with ss.128 (2) of the MVRMA; and,
- Identify areas and extent of effects, within or outside the Mackenzie Valley in which the development is likely to have a significant adverse impact or be a cause of significant public concern, in accordance with ss.128 (4) of the MVRMA.

5.2 Review Board Staff

The Review Board's Executive Director and staff are the primary contacts for the developer, aboriginal groups, government bodies (federal, territorial and municipal), non-government organizations (NGOs), expert advisors (experts contracted directly by the Review Board), the public and other interested parties. This does not limit or preclude the Developer from contacting other parties during in the EA process. The Review Board may choose to hire expert advisors to provide technical expertise on specific aspects of the EA.

5.3 Developer

The developer is expected to respond in a suitable and timely manner to directions and requests issued by the Review Board. Such requests include, but are not necessarily limited to, Information Requests, requests for translation of documents, the request for the developer's presence at Public Hearings, and requests to produce public information material.

The developer may present additional information at any time to the Review Board beyond what was requested during the EA process. The Review Board encourages the developer to continue consulting all potentially affected communities and organizations during the EA process. The Review Board may request that the Developer provide a written record verifying consultation, including how the consultations have influenced the design of any part of the development.

5.4 Government Bodies

Government bodies may be involved in the EA process as a regulatory authority as defined in the MVRMA, a Responsible Minister as defined in the MVRMA, a Federal Minister as defined in the

MVRMA, or as a provider of technical information.

5.5 Other Parties

Aboriginal groups, communities, or land owners that may potentially be affected by the development can obtain standing as "parties" (formerly known as "Directly Affected Parties and Interveners"). The standing of an individual or organization as a party is subject to approval by the Review Board. Being granted status gives the party the right to fully participate in the EA. Public interest groups, non-governmental organizations and other interested parties may participate in the EA as parties.

Parties may present information at any time during the EA and may be given an opportunity to submit information requests for Review Board approval during the analysis and hearing phases. Party status may be granted at any time during the proceedings.

6 EA START-UP AND SCOPING SCHEDULE

The table below outlines the milestones of phases one (start-up) and two (scoping) of the EA. All dates are target periods and are subject to change. 'Days' refers to business days and not calendar days.

Milestone	Estimated Working Days
Start-Up Phase	
Referral to Environmental Assessment	April 2, 2008
Public notification of referral	April 7, 2008
Draft Work plan issued for comments	Late May, 2008
Work plan comment deadline	Mid June, 2008
Work plan finalization	Late June, 2008
Scoping Phase	
Preparation and conduct of scoping session (location TBD)	Early June, 2008
Preparation and conduct of scoping hearing (location TBD)	Early July, 2008
Referral to EIR	
Draft Terms of Reference preparation	Mid July, 2008
Terms of Reference comment period	End of July, 2008
Preparation and release of Final Terms of Reference	Mid August, 2008

After the first two phases of the EA have ended, there will be a decision point. If the decision made by the Review Board is to continue ahead with the EA, a more detailed timeline will be published with the Terms of Reference for this assessment.

Milestone	Rough Timeline
Analytical Phase	
Developer's Assessment Report / EIS	November, 2008
Conformity Check	December, 2008
Information Requests- Round One	1 st Quarter, 2009
Focused small technical meetings	2 nd Quarter, 2009
General technical sessions	2 nd Quarter, 2009
Technical reports	2 nd Quarter, 2009
Hearings Phase	
Pre-Hearing Conference	3 rd Quarter, 2009
Public Hearings	3 rd Quarter, 2009
Decision Phase	
Report of EA / Panel Report	4 th Quarter 2009

The Review Board always reserves the option of altering the planned schedule of an EA. The Review Board may decide that one or more components of an EA, which are included in the work plan, are no longer necessary to accurately assess the proposed development and it may cancel those components. However, in such cases the Review Board will typically give the parties an opportunity to comment on its decision.

Written Submissions

All parties, as well as the public are invited to submit evidence that, in their opinion, will assist the Review Board in achieving the purposes of phase one and two as outlined in this work plan. Written submission will be placed on the public record. Upon special request, the Review Board may consider confidential submissions. Parties who do not wish to have their submission put on the public record must contact Review Board staff prior to making a submission. Requests for confidentiality will be considered on a case by case basis.

Submissions should be in a format that is easily accessible to all EA participants. The Review Board prefers documents to be submitted digitally in either Word or PDF format. However, hardcopies and faxed transmissions are acceptable as long as they are printed and can be

reproduced, via photocopier, in a clearly legible manner. For regular mail, the date the submission is received at the Review Board's office is considered to be the submission date. The Review Board will not consider any submission after the closing of the public record.

Oversized items, or items that are difficult to reproduce, such as colour maps, should be submitted digitally, and/or hardcopy in sufficient quantities to be distributed to those parties with limited access to computer technology. Please contact the Review Board staff for the quantities required.

6.1 Public Hearings

The Review Board will hold its community scoping hearings a location yet to be determined. It will be conducted as a "community hearing" as defined in the Review Board's *Rules of Procedure*. (More information on public hearings is available in s3.15 of the Review Board's *Environmental Impact Assessment Guidelines*).

6.2 Scoping Phase Decisions

Following the scoping hearings and the receipt of written submissions, the Review Board will consider the evidence brought before it and will decide to either order an Environmental Impact Review or to continue at the Environmental Assessment level. In the former case, the Board will issue a report, refer the development to an EIR, strike a panel, and continue on with the assessment process.