

Giant Mine Remediation Project Environmental Assessment Opening Remarks



Alternatives North

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September 10, 2012

Presentation Outline

- Background on Alternatives North
- General Subjects Reviewed
- Unusual Aspects of this EA
- Unresolved Issues
- Summary
- Conclusions
- Next Steps



Alternatives North

- based in Yellowknife with supporters in communities
- began in 1992
- social justice group with representatives of churches, labour unions, environmental organizations, women and family groups, seniors, and anti-poverty interests

Alternatives North

- **Goal: seek best possible mine closure that includes the interests of future generations**
- **worked closely with the Yellowknives Dene First Nation and City of Yellowknife**
- **acknowledge participant funding from AANDC and financial support from the Western Mining Action Network and the Abandoned Mines Program (Memorial University)**

General Subjects Reviewed

Main focus on two issues

- **Independent Oversight**
 - Government has too many roles and responsibilities on Giant Mine remediation
 - No meaningful public involvement in the project to date
- **Perpetual Care**
 - Need to maintain and monitor the frozen blocks at Giant Mine forever

General Subjects Reviewed

Concerns on other issues:

- Impact on ice in Back Bay,
- Impact on water quality in Back and Yellowknife bays,
- Impact on air quality,
- Risk assessment and management, and
- Other issues identified in our Technical Report

Unusual Aspects of this EA

- Most EAs deal with private sector developments
- Most EAs deal with new developments at a site

This EA is different

- This EA deals with a development after-the-fact, remediation to reduce or eliminate risk and impacts
- Development that requires humans to monitor and manage forever
- Many aspects of this project are still conceptual

Unresolved Issues

PUBLIC CONCERN

- Development referred for an EA based on public concern, basically a lack of trust
- Little progress on the issue of trust during the course of the EA
 - Developer has caused delays during this EA at least 9 times for a total of more than 200 days
 - Site Stabilization Plan developed and approved in secret, designed to avoid EA and split the project
 - No consent or support from the City of Yellowknife or YKDFN for this project to proceed
- No “Social Licence”

Unresolved Issues

PUBLIC CONCERN

- **Support the call for an apology and compensation as made by the YKDFN Elders to begin to build trust**
- **Need to learn from Giant Mine and prevent more perpetual care sites by improving the mining reclamation regime**
- **Significant public concern remains**

Unresolved Issues

ICE THINNING

- Issue of ice thinning has been raised for over two years
- Developer has not done the modelling or field work to show how much thinning of ice will happen on Back Bay
- Will Back Bay be safe for winter travel?
- Source of significant public concern

Unresolved Issues

WATER QUALITY (YELLOWKNIFE AND BACK BAY)

- Issue of water quality has been raised for almost two years
- Developer has not done the modelling to show what the changes in water quality will be
- Developer will not commit to pay for any increased costs for water treatment in the case of accidents or malfunctions
- Potential for significant adverse environmental impacts

Unresolved Issues

TAILINGS COVER AND PERFORMANCE

- No clear objectives, design or performance criteria
- Two of four test pads under water and of no practical use
- Potential for significant adverse environmental impacts

Unresolved Issues

ENVIRONMENTAL MANAGEMENT PLANS

- **AANDC resisted following its own Mine Site Reclamation Guidelines**
- **Need for clear plans based on mine components**
 - closure objectives
 - measureable performance or closure criteria (how to measure success)
 - monitoring systems to track performance
 - triggers or thresholds for specific actions (a plan when things go wrong)
 - where there is uncertainty, research and design work and a schedule to fill gaps

Unresolved Issues

ENVIRONMENTAL MANAGEMENT PLANS

- Working Group established at suggestion of AN and YKDFN
- Good step but limited progress to date
- Potential for significant adverse environmental impacts

Unresolved Issues

INDEPENDENT OVERSIGHT

- **AANDC acknowledges conflicting roles of developer, inspector, enforcer, duty to Aboriginal peoples**
- **No written guidance for employees to avoid conflicts, clear example of inspector being overridden at Giant**
- **Dramatic shift in project management away from Yellowknife to Ottawa and Edmonton**

Unresolved Issues

INDEPENDENT OVERSIGHT

- **AANDC has supported and signed agreements for oversight for northern diamond mines**
- **Oversight Working Group set up 6 months ago**
 - 11 meetings, 6 drafts of a discussion paper, 7 drafts of an environmental agreement
 - AANDC will not commit to independent oversight, wants “further discussions”
- **Source of significant public concern**

Unresolved Issues

ONGOING RESEARCH AND DEVELOPMENT

- **AANDC has approached the frozen block method as the full and final solution**
- **Onus on future generations to come up with a solution**
- **AANDC will not commit to proactive research and development of a better solution, only a ten-year technology review**

Unresolved Issues

ONGOING RESEARCH AND DEVELOPMENT

- **Research and development is an investment and can reduce perpetual care costs and requirements**
- **Frozen block unacceptable without a proactive research and development program**
- **Source of significant public concern**

Unresolved Issues

PERPETUAL CARE

- **Perpetual care required at Giant no matter what is done with the site**
- **Developer has not minimized perpetual care requirements, “risk management” approach used**
- **Lack of a federal policy framework for perpetual care of remediated sites**

Unresolved Issues

PERPETUAL CARE

- **Remediation Plan does not adopt best practices learned from other perpetual care sites**
- **No firm commitment to develop a perpetual care plan, only vague commitment to discuss**
- **Source of significant public concern**

Unresolved Issues

GIANT MINE ENVIRONMENTAL AGREEMENT

- **Legally binding agreement needed to start to build better relationships and to firm up commitments**
- **Agreement is the way to:**
 - **build independent oversight**
 - **ensure ongoing research and development**
 - **spell out environmental management and monitoring**
 - **set out perpetual care planning and management requirements**

Unresolved Issues

GIANT MINE ENVIRONMENTAL AGREEMENT

- Oversight Working Group has made limited progress
 - AANDC will not commit to an agreement
- An agreement is the best way to mitigate and reduce significant public concern
- An agreement is a “social contract”, just like the contracts necessary to carry out the physical work of the project

Summary

- Many technical issues still unresolved
- Little progress on “social licence” or “social contract”
- AANDC/GNWT accepted 1 of 11 recommended measures from Alternatives North
- Significant public concern remains around the Giant Mine Remediation Plan
- Potential for significant adverse environmental impacts caused by the development

Summary

Engineering

Physical Works and Management

Active/Passive Freezing System

Baker Creek Enhancements

New Water Treatment Plan

Giant Mine
Remediation
Project

Human and Social Aspects Community Engagement

Apology and Compensation X

Local Political Support for Project X

Ongoing Research and Development X

Independent Oversight X

Long-Term Funding Arrangements X

Full Disclosure of Information and Records X

Site Designation and Land Use Controls X

Comprehensive Perpetual Care Plan X

Environmental Agreement X

**REDUNDANCIES and
EXTRA PRECAUTIONS**

NO “SOCIAL LICENCE” OR CONTRACT

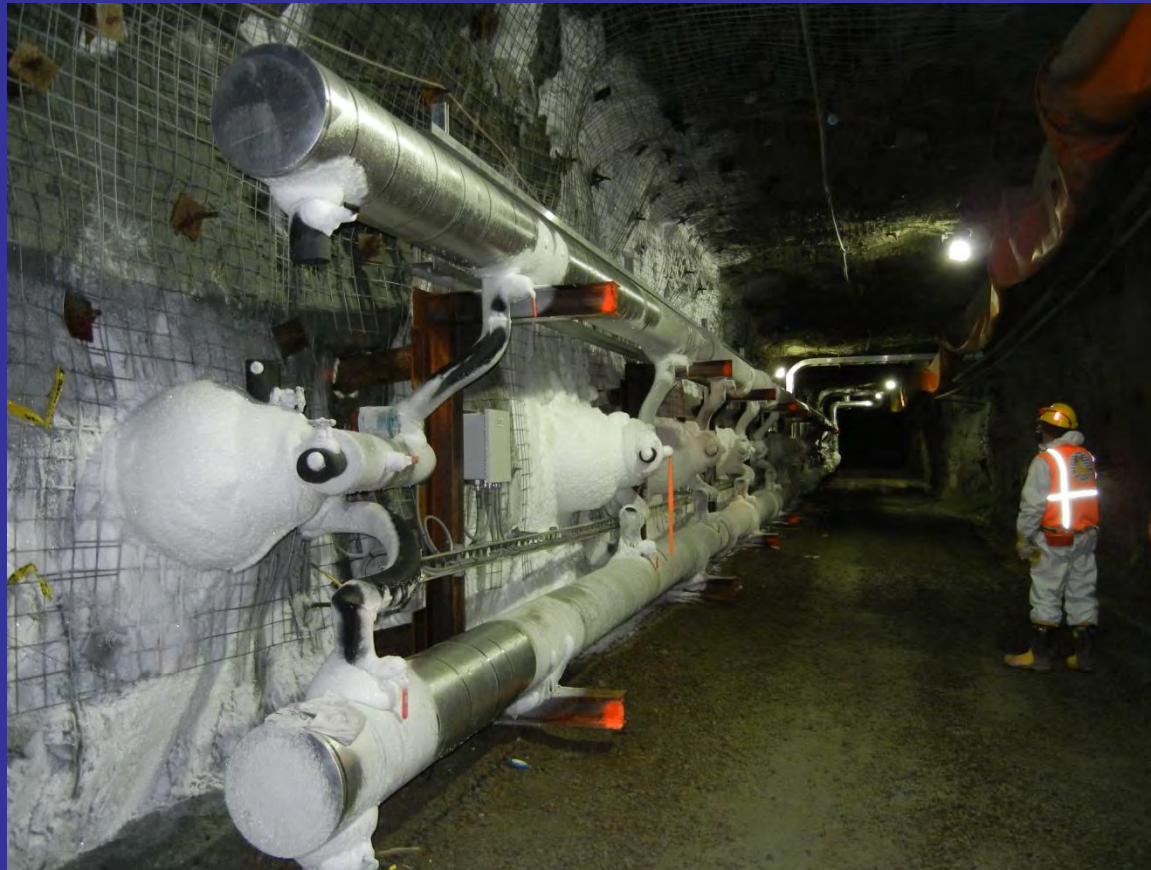
Conclusions

- **AN finds that the development can proceed but only if recommended measures are implemented as a complete package**
- **AN still requests binding measures even if the Developer has made similar commitments (personnel and priorities change)**

Next Steps

- **Concern that AANDC and GNWT will make further unilateral exemptions of parts of the Remediation Plan from EA**
- **Concern that AANDC and GNWT will “accept the intent” of Review Board measures or try to significantly modify measures recommended by the Review Board**

Giant Mine Remediation Project Environmental Assessment Frozen Block and Underground



Presentation Outline

- **Frozen Block Method Trade-Off**
- **Unresolved Technical Issues**
- **Community Involvement?**
- **Conclusions**



Frozen Block Method

- Little doubt that Frozen Block will help contain arsenic and can be made to work

TRADE-OFF?

- Frozen Block will require human monitoring and management forever
- Transfer of risk to future generations
- No perpetual care plan
- Not a permanent solution

Unresolved Technical Issues

- concern with effects of wetting on integrity of chambers
 - Injecting water may cause cracking of walls and ceiling of chambers
 - Concerns with reversibility of frozen block with wetting
- good news from Freeze Optimization Study
 - wetting may not be necessary
 - hybrid thermosyphons may work without an active freezing system

Community Involvement?

- No meaningful involvement of the community with Frozen Block method

Past (1999-2005)

- no participant funding offered
- no involvement in the selection or application of the evaluation criteria

Present

- poor communications of results of Freeze Optimization Study
- No commitment to involve parties in final design

Community Involvement?

Future?

- Parties should be involved in selecting evaluation criteria for final design options
 - Reversibility, can we thaw it out if needed?
 - Minimize energy needs, use low technology
 - Minimize perpetual care requirements
- public reporting of monitoring results?
- public access to 'live' monitoring results

Community Involvement?

Future?

- **Performance criteria or measures of success not identified for final design**
 - **Little progress through Environmental Management Working Group, Frozen Block should be the priority**
 - **Should be comprehensive but easy to understand**
 - **Should provide 'early warning' to community of any problems**

Community Involvement?

Future?

- Freezing arsenic forever is not a permanent solution
- Need for a proactive research and development program into a more permanent solution than trying to freeze arsenic forever
 - 'Freeze it and forget it' approach not acceptable
 - 10-year technical review makes us wait, does not show a strong commitment to future generations
 - Should conduct state of the art review, identify information and technological gaps, allocate funding for competitive proposals to do the work

Conclusions

- Significant public concern with frozen block
- Start to think of Frozen Block method as an “interim solution”
- A perpetual care plan is needed to monitor and manage Frozen Blocks for long-term

Conclusions

- **Start to better involve the community**
 - Final design of the Frozen Block
 - Designing public reporting of monitoring results
 - Setting the performance criteria (measures of success) that include early warning of problems
 - Develop a proactive research and development program for a more permanent solution
- **Preferred method to involve the community and mitigate public concern is through a legally binding Environmental Agreement**

Giant Mine Remediation Project Environmental Assessment Water Treatment and Management



Presentation Outline

- **Water Treatment Changes**
- **Unresolved Technical Issues**
 1. **Ice Thinning**
 2. **Water Quality**



Water Treatment Changes

- New water treatment plant a good thing

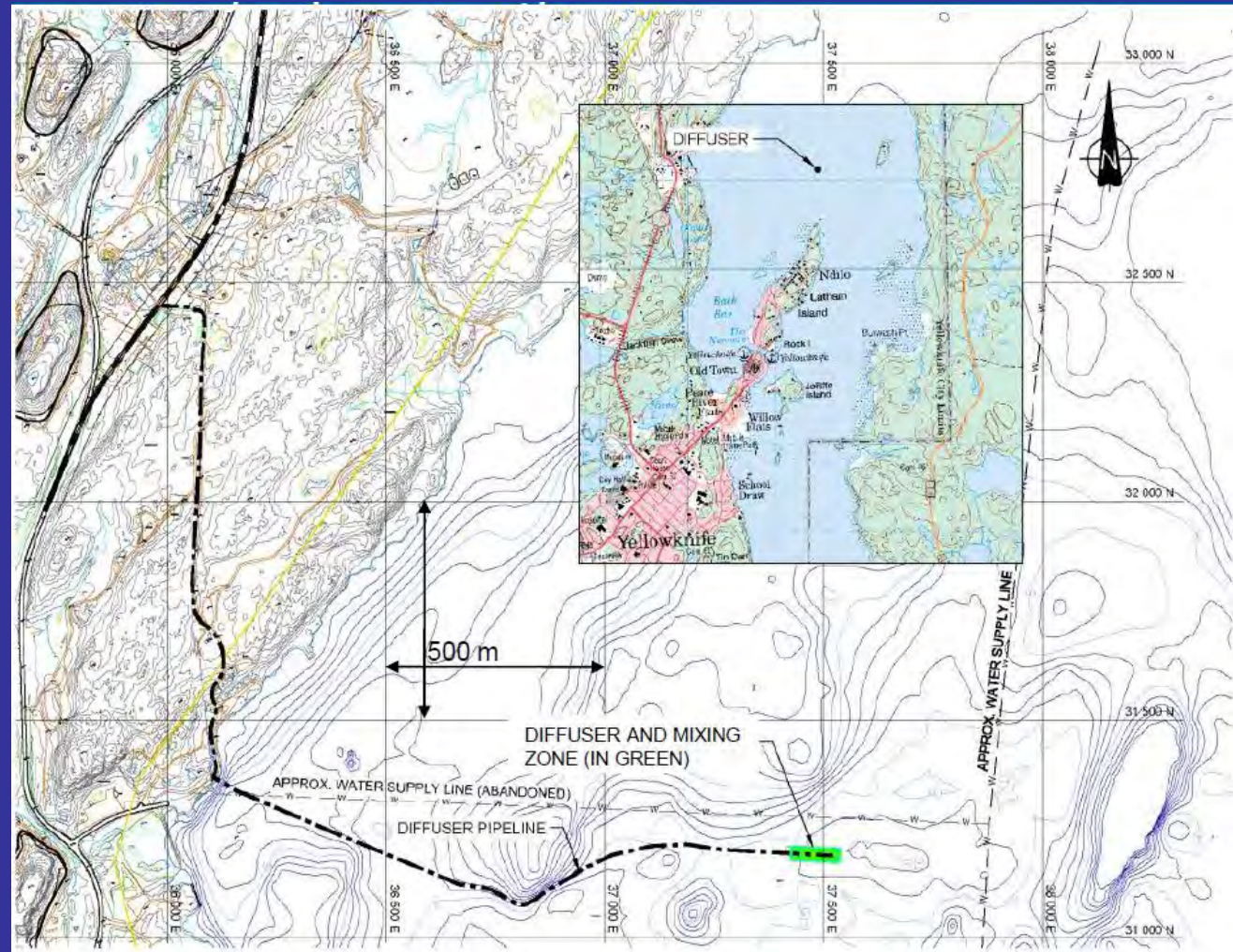
BUT

- Significant changes in discharge timing and location
- Moved from summer discharge into Baker Creek to year-round operation in Back Bay
- No final design for treatment plant
- Ice thinning and water quality issues not resolved

Unresolved Technical Issues

ICE THINNING

81 m long
diffuser to
be placed in
Back Bay
(at least
9 m below
surface)



Unresolved Technical Issues

ICE THINNING

- Issue of ice thinning due to year-round discharge was raised as early as July 2010
- Most recent presentation by Developer (June 2012) stated “local thinning of ice may occur”

Unresolved Technical Issues

ICE THINNING

- In June 2012 Developer would not commit to no ice thinning, only that ice would be “safe”
- Developer could not define “safe” and for whom (walkers, skiers, snowmobilers, Bombadiers?)
- Particular public concern with the effects on shoulder seasons when ice forming and melting

Unresolved Technical Issues

ICE THINNING

- Developer collected some ice data in February and March 2012 but has not used this to predict ice thinning
- Developer has not carried out any thermal modeling of the diffuser discharge to predict ice thinning

Unresolved Technical Issues

ICE THINNING

- Significant public safety concern
- AN recommended that Developer do following before approval
 - Complete thermal modeling and field tests
 - Prove to regulatory authorities that ice will not be thinned
 - Conduct ice monitoring and publicly report

**Developer—further discussion required,
term ‘approval’ vague**

**AN stands by recommended measure to
mitigate public concern**

Unresolved Technical Issues

WATER QUALITY

- Developer has not carried out modeling of the diffuser discharge to predict water quality in Back and Yellowknife bays
- Developer relies on a 2006 risk assessment of arsenic loadings which does not account for sediment disturbance, currents or ice cover

Unresolved Technical Issues

WATER QUALITY

- Modeling should feed into risk assessment
- Risk assessment not a substitute for good modeling and sound predictions
- Developer reaches unsupported conclusion of “no significant adverse environmental effects”

Unresolved Technical Issues

WATER QUALITY

- Residents continue to use Back and Yellowknife bays for drinking water, fishing and recreation
- City of Yellowknife examining Yellowknife Bay as a source of drinking water
- Developer will not commit to pay for extra water treatment costs in the event of accidents, malfunctions or unpredicted effects

Unresolved Technical Issues

WATER QUALITY

- Significant public concern around water quality changes in Back and Yellowknife bays
- Potential for significant adverse environmental impacts to water quality in Back and Yellowknife bays

Unresolved Technical Issues

WATER QUALITY

- AN recommended that Developer do following before approval
 - Complete water quality modeling
 - Commit to pay for extra water treatment costs
 - Prepare a comprehensive aquatic effects monitoring program

**Developer—further discussion required,
term ‘approval’ vague, agree
with monitoring program**

**AN stands by recommended measure to
mitigate public concern**

Giant Mine Remediation Project Environmental Assessment Surface Remediation



Presentation Outline

- **Surface Remediation Concerns**
- **Unresolved Issues**
 1. **Cover Design and Performance**
 2. **Air Quality**
 3. **Roaster Demolition**



Surface Remediation Concerns

- Proper surface remediation important to deal with:
 - Tailings ponds
 - Air quality impacts from windblown tailings and during construction
 - Demolition of the roaster complex
- Preferred alternatives for remediation of surface still in design phase with no plans, performance measures or contingencies
- Impact predictions not detailed or well supported

Unresolved Issues

Cover Design and Performance

- Questions raised about objectives and performance criteria (measures of success) at October 2011 Technical Sessions
- Developer contracted for two test pads in the Northwest Tailings Pond in 2007 to document settlement (sinking into the tailings), temperature and moisture content

Unresolved Issues

Cover Design and Performance

- Data to 2010 only has been provided to date
- One of the two test pads is submerged and of limited value
- Cover design not finished, only preliminary work on a revegetation study
- No performance criteria developed

Unresolved Issues

Cover Design and Performance



Trial Test Pads September 2011



Trial Test Pads June 2012

Red Lines show Test Pad under water

Unresolved Issues

Cover Design and Performance

- **Cover design objectives and performance criteria unclear**
 - Retain water or shed it?
 - Revegetated cover or not?
 - Will roots penetrate cover and uptake tailings?
- **Concern with long-term performance of tailings cover**
- **Concern with ability of cover to prevent further dust problems**

Unresolved Issues

Cover Design and Performance

- Significant public concern and potential for significant adverse environmental impacts
- AN recommended that Developer submit final cover design, objectives and performance criteria to regulatory authorities for approval

Developer—Agree

AN concerned that Developer did not ‘accept’ recommendation

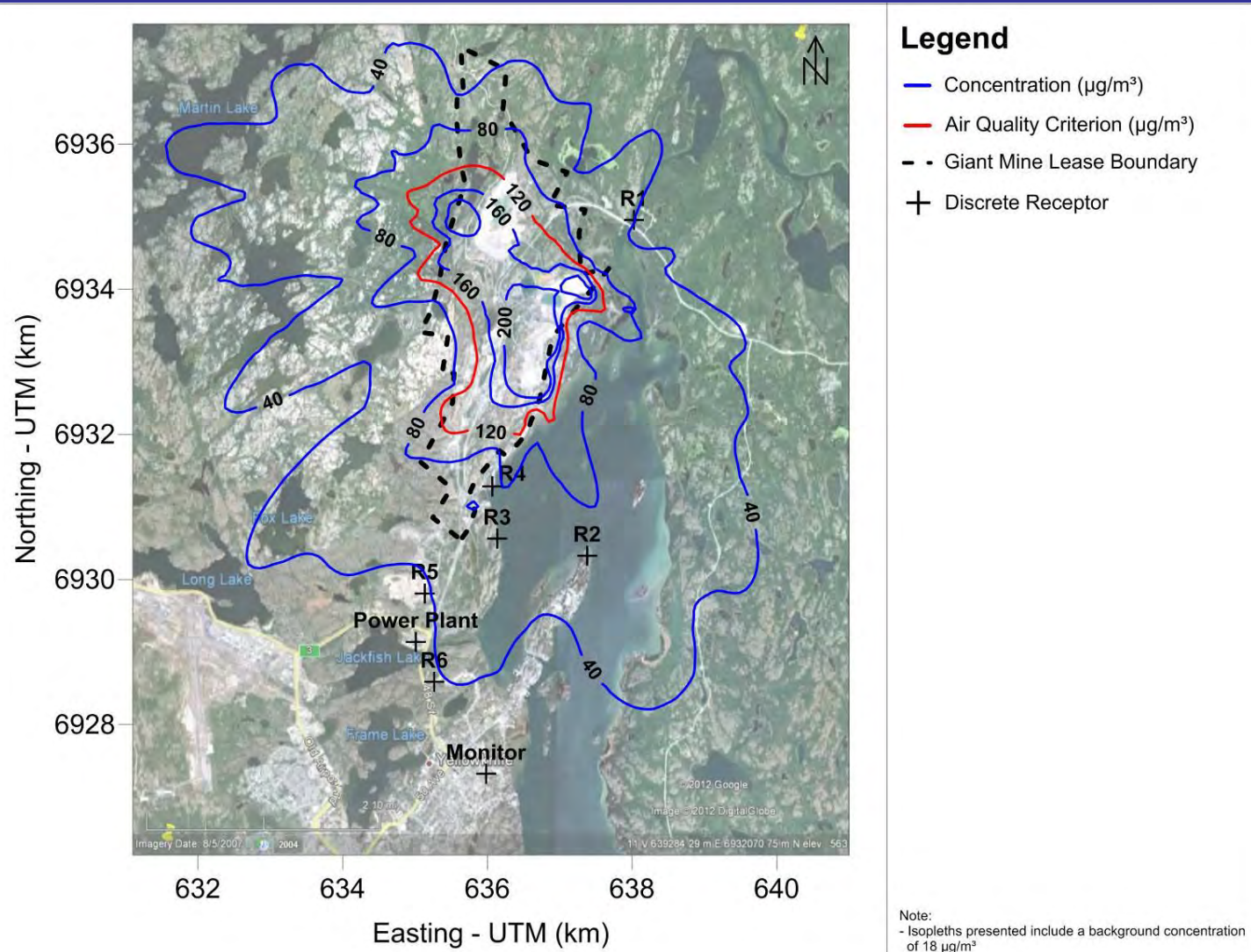
Unresolved Issues

Air Quality

- **Concerns raised over assessment of air quality impacts in the DAR**
- **Predictions of air quality contaminants above guidelines in areas accessible by public and site workers**
- **Triggers or thresholds for actions or contingencies not identified**

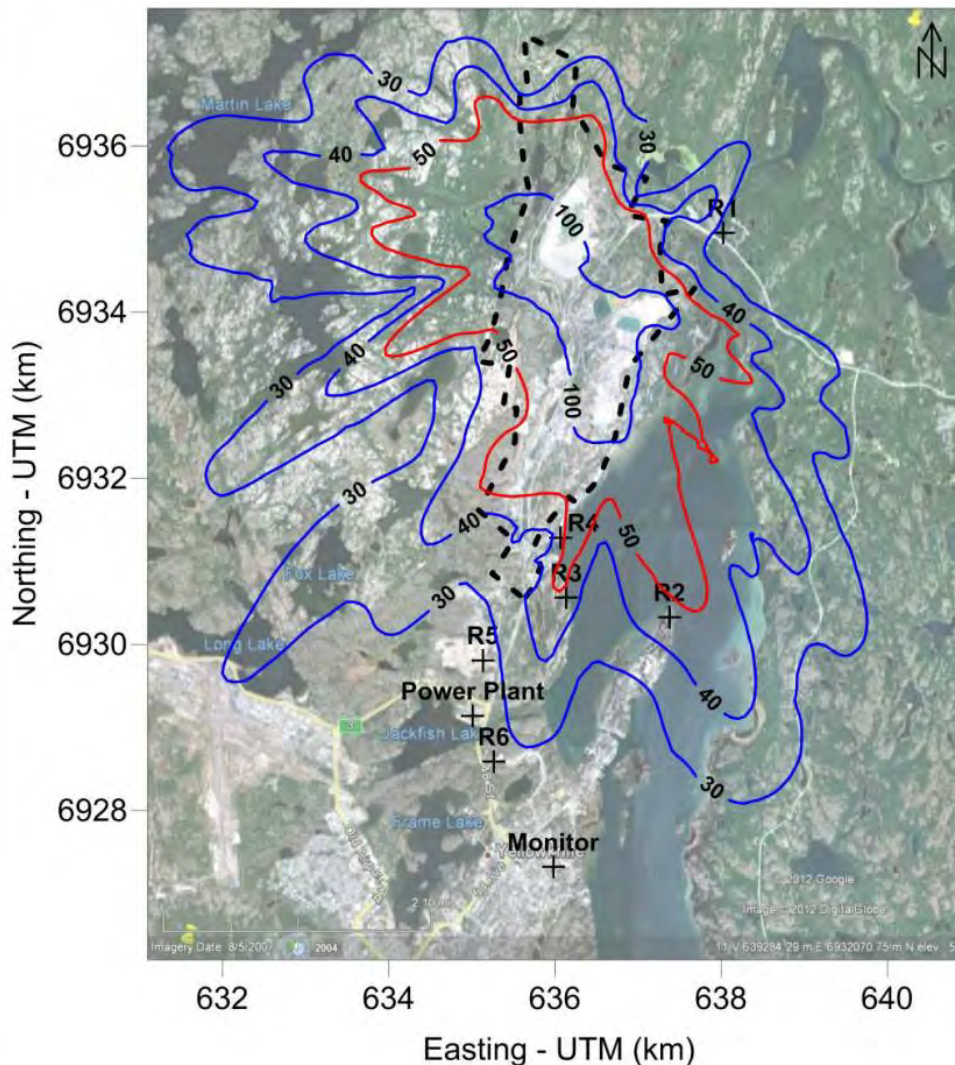
Unresolved Issues

Air Quality (24 hr. TSP)



Unresolved Issues

Air Quality (24 hr. PM₁₀)



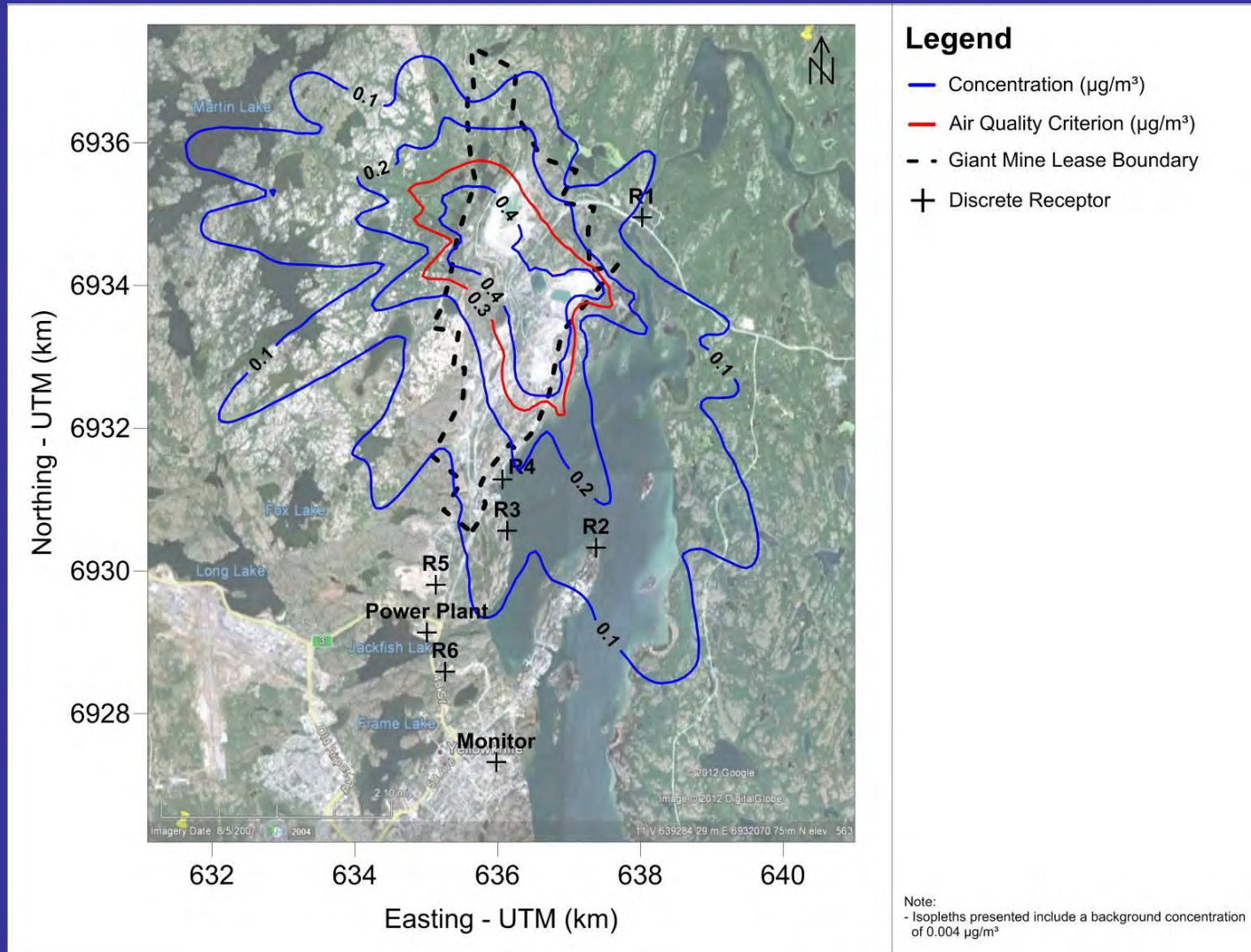
Legend

- Concentration (µg/m³)
- Air Quality Criterion (µg/m³)
- - Giant Mine Lease Boundary
- + Discrete Receptor

Note:
- Isopleths presented include a background concentration of 9 µg/m³

Unresolved Issues

Air Quality (24 hr. Arsenic)



Unresolved Issues

Air Quality

- **Need to develop specific arsenic air quality guidelines for NWT as result of work to be done at Giant and for exposure of workers at the site**

Unresolved Issues

Air Quality

- AN recommended Developer prepare an air quality monitoring program to test the performance of tailings covers, with thresholds tied to specific actions. We would also add that the program should also cover site construction activities.

Developer—Accept in principle

AN concerned that Developer did not ‘accept’ recommendation.

Unresolved Issues

Roaster Demolition

- **Most highly contaminated structure and part of the site on the surface (4,900 cubic metres of arsenic trioxide)**
- **Developer has not released a plan for how demolition and disposal will be carried out**

Unresolved Issues

Roaster Demolition

- Developer put together ‘secret’ Site Stabilization Plan to exempt roaster demolition from ongoing EA, approved by AANDC Minister in November 2011
- Developer resisted submission of Plan even though it committed to “early and ongoing engagement and dialogue”
- Questionable redactions made to Plan when finally submitted in August 2012

Unresolved Issues

Roaster Demolition

- Alternatives North does not object to legitimate emergency work being carried out, prefer that this be communicated clearly
- Developer appears to be want to push ahead with full demolition rather than immediate emergency work (e.g. taking down the flues on the roaster)

Unresolved Issues

Roaster Demolition

- **Developer has not proven**
 - **there is an emergency (e.g. stamped engineering reports based on site visits)**
 - **it has the ability or capacity to carry out the work in a timely fashion**
 - **Current plan is to contract this work using regular contracting route (August 2012) rather than emergency authority**

Unresolved Issues

Roaster Demolition

- Alternatives North concerned that AANDC will exempt the roaster demolition from the Environmental Assessment
- Review Board should exercise its authority over any roaster demolition exemption
 - Need for evidence of an emergency
 - Demonstrated capability to do the work in a timely fashion
 - seek commitment that EA measures will be applied to any exempted work

Giant Mine Remediation Project Environmental Assessment Perpetual Care



Presentation Outline

- Perpetual Care Overview
- Best Practices
- Developer Position & Commitment
- Conclusions



Underground Monitoring Area for Test Freeze

Perpetual Care Overview

Key Lines of Inquiry for EA

- arsenic trioxide containment for an indefinite period
- Questions related to monitoring and maintenance activities at the Giant Mine after the active freezing stage
- Alternatives North recognizes that perpetual care at Giant Mine is inevitable

Perpetual Care Overview

- Perpetual care raised as an issue during the development of the Remediation Plan in 2003-05, major theme in this EA
- Do selected remediation options minimize or reduce perpetual care requirements?
- Has the Developer adopted best practices and lessons learned from other perpetual care sites and situations?
- Is there a plan for perpetual care?

Perpetual Care at Giant Mine

Mine Component or Feature	GMRP Remediation	Long-Term Remediation to Minimize Perpetual Care
Arsenic Storage Chamber Underground	Freeze in place forever	No need for permanent containment--removal and reprocess into a less toxic form or in-situ treatment
Tailings Areas	Drain, grade and engineered cover	No need for cover (no inspection and maintenance), removal and use as backfill
Baker Creek	Temporary measures to prevent overtop during frozen block implementation	Remove long-term risk of arsenic chambers being flooded or eroded if there is uncontrolled thawing, permanent North Diversion by rerouting drainage away from the site (no need for continued monitoring of Baker Creek, sediment transport reduced or eliminated)
Open Pits	Fencing and berms	Backfill, sloping of edges and reflooding (no need for fencing and maintenance)
Water Treatment	New water treatment plant and diffuser into Back Bay	Reduce treatment requirements Source removal? Biological or in-situ treatment? Stop or reduce infiltration (North Diversion)?
Buildings and Infrastructure	Demolition, toxic goes to frozen block or as frozen backfill, hazardous and non-hazardous landfilled on site	Recycling and reprocessing of all toxic, hazardous and non-hazardous material—nothing left on site
Contaminated Soils	Excavate and landfill or barrier containment	Removal and treatment to reduce or eliminate maintenance and monitoring

Perpetual Care Overview

- **best practices and lessons learned studied by Joan Kuyek, other information from nuclear waste sites and elsewhere**
- **Perpetual Care Planning and Management**
 - **proper record management and preservation**
 - **site designation and land use controls**
 - **long-term funding**
 - **communicating with future generations**
 - **transitioning of site from active remediation to perpetual care**
 - **scenario-building and planning**
 - **a comprehensive perpetual care plan**

Record Management and Preservation

Best Practices

- Hanford nuclear site, all records disclosed and available on-line
- France, records on acid-free paper to be kept at nuclear waste site and at the National Archives

Developer Position and Commitment

- No detailed inventory of records
- Records to be deposited with the Library and Archives Canada (Ottawa)
- No long-term plan for records preservation or public access

Site Designation and Land Use Controls

Best Practices

- Hanford nuclear site, interpretive centres have been established
- Superfund sites have well developed institutional control programs
- Avens Associates report on site designation options for Giant as part of institutional memory

Developer Position and Commitment

- No plan, vague commitment to discuss with City
- No analysis of various tools or options for site designation or land use controls

Long-Term Funding

Best Practices

- Hanford and other sites, work done on long-term funding option including trusts
- Pembina Institute report on long-term funding outlines some current examples of such arrangements within the federal system

Developer Position and Commitment

- Regular federal funding system is reliable and has a proven track record
- Possibly review before perpetual care phase
- No response to Pembina Institute report

Communicating with Future Generations

Best Practices

- Hanford, interpretive centres have been established
- Western Isolation Pilot Plant, extensive planning for site markers and symbols
- Finland (film “Into Eternity”), struggling with how to communicate with future generations

Developer Position and Commitment

- No plans for signage, monuments or symbols at site
- Vague commitment to discuss with advisory group

Transition Plan (active site to perpetual care)

Best Practices

- Superfund sites, planning for transfer and transition of sites to other owners
- Hanford, planning has been done to transition the site from active remediation to long-term stewardship

Developer Position and Commitment

- No plans
- Vague commitment to discuss with stakeholders

Scenario Building and Planning

Best Practices

- **Waste Isolation Pilot Project, multi-stakeholder panel developed scenarios and modeling**
- **France, national debate on nuclear disposal, reversibility emerged as the priority**
- **Other site planning includes glaciation and shoreline change**

Developer Position and Commitment

- **Risk assessment limited to a 100-year timeframe**
- **No analysis of long-term events such as glaciations, shoreline change, no central government**

Comprehensive Perpetual Care Plan

Best Practices

- Hanford Long-Term Stewardship Plan
- France, debate on nuclear waste led to law where minimum 100-year reversibility is a mandatory

Developer Position and Commitment

- “Further discussion required”
- Vague commitment to examine lessons learned from nuclear waste management, but no clear commitment to prepare a plan or a timeline for one

Conclusions

- **Remediation Plan and Developer's commitments fall far short of best practices and lessons learned for perpetual care**
- **Significant public concern with lack of perpetual care planning and management**

Conclusions

- AN recommended that a perpetual care plan requirement become a binding measure

**Developer—further discussion required,
vague commitments**

**AN stands by recommended measure to
mitigate public concern**

Giant Mine Remediation Project Environmental Assessment Monitoring & Independent Oversight



Presentation Outline

- Environmental Management Plans
- Independent Oversight
- Environmental Agreement
- Conclusions



Oversight at Giant Mine Public Information Session March 2012

Environmental Management Plans

- **Good plans contain**
 - objectives
 - measureable performance or criteria (measures of success)
 - monitoring systems to track what happens
 - triggers or thresholds for specific actions
 - where there is uncertainty, research and design work and a schedule to fill gaps
- **developed collaboratively with interested parties**

Environmental Management Plans

- **DAR did not provide detail or a framework toward environmental management plans**
- **DAR did not satisfy AANDC's own Mine Site Reclamation Guidelines for the NWT**
- **Without proper environmental management plans and monitoring programs, there is no way to define or measure success**

Environmental Management Plans

- Working Group established at suggestion of AN and YKDFN
- Working Group usually required at regulatory phase
- Working Group a good step but very slow progress
 - 3 meetings to date
 - Focused largely on definitions and a framework

Environmental Management Plans

- Unclear if Project Team will seek ISO certification (external audit requirements)
- Environmental Management Plan for the Frozen Block should be a priority, hoped for a draft by now
- Without plans, real potential for adverse impacts, particularly from accidents or malfunctions or simple poor performance that might go unmonitored or not acted upon

Environmental Management Plans

- Lack of plans a potential source for significant adverse environmental impacts and significant public concern
- AN recommended that Developer submit plans for approval by regulatory authorities

**Developer—further discussion required,
then agreed in principle**

**AN stands by recommended measure to
mitigate public concern and potential impacts**

INDEPENDENT OVERSIGHT

- YKDFN, City and Kevin O'Reilly submitted a proposal for case studies and lessons learned on oversight to AANDC in October 2009
- Proposal rejected 11 months later, letter from Minister stated work to be done internally as part of DAR
- Nothing in DAR about independent oversight

INDEPENDENT OVERSIGHT

- **AANDC acknowledges conflicting roles of developer, inspector, enforcer, duty to Aboriginal peoples in DAR**
- **clear example of inspector being overridden at Giant during Freeze Optimization Study drilling**
- **No written guidance for employees to avoid conflicts**

INDEPENDENT OVERSIGHT

- **AANDC did not obtain a land use permit for the FOS even though every other party, including GNWT, thought it should**
- **AANDC did not obtain a Development Permit from the City for the demolition of the conveyor**

INDEPENDENT OVERSIGHT

- **Dramatic shift in project management away from Yellowknife to Ottawa and Edmonton**
 - Several key long-time staff have left
 - Resistance from AANDC to supply an organizational chart
 - Chart appears to show little decision-making authority in Yellowknife
- **Could lead to an even less responsive approach by the Giant Mine Team**

INDEPENDENT OVERSIGHT

- AN recommended a suggestion from the Review Board that
 - authority and technical support be located in Yellowknife
 - to “increase accountability, transparency responsiveness and build public confidence”

Developer—multi-faceted team in various centres (did not answer)

AN stands by recommended suggestion

INDEPENDENT OVERSIGHT

- AANDC has supported and signed agreements for oversight for northern diamond mines
- Oversight Working Group set up 6 months ago
 - 11 meetings, 6 drafts of a discussion paper, 7 drafts of an environmental agreement
 - AANDC and GNWT will not commit to independent oversight
- Significant public concern with lack of independent oversight

INDEPENDENT OVERSIGHT

- AN recommended a binding measure for a mutually agreeable public oversight body for the Giant Mine before the project proceeds (as part of an environmental agreement)

Developer—commits to “ongoing discussions”

AN stands by recommended measure to mitigate public concern

ENVIRONMENTAL AGREEMENT

- **No way to require financial security for the Giant Mine Remediation Project**
- **environmental agreement is a way to backstop commitments and serve as a form of 'security'**

ENVIRONMENTAL AGREEMENT

- AANDC has already signed environmental agreements for NWT diamond mines
- Good track record on implementation and success of these agreements
- Duplication or overlap with regulatory functions and bodies has not proven to be a problem

ENVIRONMENTAL AGREEMENT

- Legally binding agreement needed to firm up commitments and to reduce significant public concern
- Agreement is the way to :
 - build independent oversight
 - ensure ongoing research and development,
 - spell out environmental management and monitoring
 - set out perpetual care planning and management requirements
 - start to build public confidence and trust

ENVIRONMENTAL AGREEMENT

- **An agreement should contain**
 - Roles and responsibilities
 - Oversight body (mandate, composition, reporting, funding, advisory in nature with no authority over project)
 - Project reporting and access to information
 - Agreed upon commitments for environmental management plans and monitoring programs
 - Research and development for a permanent solution
 - Dispute resolution (for compliance with the agreement)
 - Term of the agreement, review and amendment

ENVIRONMENTAL AGREEMENT

An agreement can be a package of mutually reinforcing commitments and measures to build confidence, accountability, transparency and trust.

An agreement is a “social contract”, just like the contracts necessary to carry out the physical work of the project

ENVIRONMENTAL AGREEMENT

- Oversight Working Group set up in March 2012 (AANDC, GNWT, YKDFN, City and Alternatives North)
 - 11 meetings, 6 drafts of a discussion paper, 7 drafts of an environmental agreement
 - limited progress
 - Alternatives North prepared to sign off on agreement months ago, subject to final review after EA completed

ENVIRONMENTAL AGREEMENT

- Alternatives North position very clear
 - Agreement should be legally binding
 - if not optional or non-enforceable arrangement?
 - If not, subject to changing personnel and priorities (letter or indication of support not acceptable)
 - Agreement should be for duration of project (forever)
 - subject to review and amendment as necessary (recognition of changing roles and funding level for perpetual care)

ENVIRONMENTAL AGREEMENT

- Alternatives North position very clear
 - Dispute resolution essential for non-compliance with agreement, not for overturning management decisions
 - Need for a proactive approach to a more permanent solution with research and development (10-year technology review makes us all wait for something better to come along)
- Agreement or an agreement-in-principle appears unlikely, despite interest and pressure from the Review Board

ENVIRONMENTAL AGREEMENT

- An agreement is the best way to mitigate significant public concern with the Giant Mine Remediation Project
- AN recommended if no agreement before hearing, the parties should enter into mediation and if necessary, binding arbitration, to reach an agreement before the project proceeds

Developer—commits to “ongoing discussions”

AN stands by recommended measure to mitigate public concern