

Opening statement:

As the only nongovernmental party to the Giant Mine remediation project working group, Alternatives North strives to speak eloquently for a great many different community voices
Including men

And women, and non-binary people

The old

and the young

Families

And individuals

Those making a new home in the North

And those for whom this has always been home

We hope to honour the legacy of ancestors who came before us

And the hopes of Northerners yet to come, from now, until the end of time

This is our home,

and we love it here.

We are working on the Giant Mine remediation under the aegis of the Environmental Agreement and with the financial support of CIRNAC, which we gratefully acknowledge.

Alternatives North believes that the strongest aspect of this project is its ongoing engagement with the many impacted communities. We believe that community input is essential to developing comprehensive mitigation measures for the Giant Mine site. As long as we are here and we care about the site, we have a role to play in the proceedings. Ongoing engagement keeps alive the memories of Giant Mine and its impact, what we've learned, and the knowledge we need to keep one another safe.

We respect the vast technical expertise and know-how that has been applied to this project, and hope that our involvement, bringing new eyes and different perspectives, will help broaden the approach. We want to encourage the exploration of as many options as possible. We also strive through our consistent focus on advocating for fundamental principles to help keep a complicated process on track, and responsive.

The Mackenzie Valley Land and Water Board faces an enormous responsibility.

When people say that water is life, we aren't exaggerating.

Pretty much everywhere on planet Earth that we find water we find life

and there is nowhere in our vast cosmos our science can currently imagine life without it.

Great Slave Lake is the tenth largest on the planet,

With a catchment area of more than a million square kilometres,

and represents the essential lifeblood of our communities' well being.

We encourage the board to use the full scope of their authority with our support

To protect that most precious asset to the greatest possible extent.

Its use, its preservation, the safety of biomes within and dependent upon it

will all be impacted by the outcome of these hearings.

We thank all representatives of all the parties for their diligent work in bettering this process

And hope hereby to make a strong and still improving plan even better.

Presentation:

Slide 1

Thank you. You don't need us to read our slides to you, but we will progress through them while we support the material the board has already read with further context to better clarify our position. We encourage you to focus on what we are saying, and return to the visual presentation at a later time to read the contents if you wish; it is publicly available.

We will start at slide number 2, with the image of a wristwatch, and for those who wish to follow along on the phone we will snap our fingers to indicate when we are advancing a slide.

Slide 2

I wrote you a song to sing as part of our presentation today, but lest my singing appear in any way disrespectful of this process, I will restrict myself to opening with the lyrics:

Sleep, Giant monster, stay underground
Don't you leak into the water, and then poison our town
You're deadly forever, and a ward of the crown
We stand determined to keep your risks down

Arsenic trioxide, a deadly dust
Leaves all future generations with no choice but to trust
Your modern caretakers will do all that we must
To protect their interests in a way that is just

How many generations is forever?
How many future futures in our hands?
This toxic legacy compels us
To enact our most robust plans

When all our bones to dust have crumbled
And all our names to time are lost
Only then may the great North reckon
To count this project's final cost

So please, as you make this decision
Demand the best, and hear advice
So as this complex plan moves forward
We minimize tomorrow's price

As board members deliberate, you won't remember everything that was said in a long week of hearings, but you would remember better if Michael sang you a song. That is why Alternatives North believes that funding for the arts should play a role in Giant Mine communication efforts: humanity remembers Gilgamesh and the Magic Flute better than the edicts of the governments of their time.

Slide 3

We thank the board for their time, and the other parties for continuing to engage in good faith.

Slide 4

To limit how we define jurisdiction may serve to abdicate some of our obligation to future residents who cannot be here to advocate on their own behalf.

In challenging the board's jurisdiction to address some of the recommendations of the parties, the proponent submits that the Water Licence and Land Use Permit issued by the board must focus only on activities specific to the Board's mandate. The Mackenzie Valley Resource Management Act says

101.1 (1) The objectives of the Board are to provide for the conservation, development and utilization of land and water resources in a manner that will provide the optimum benefit generally for all Canadians and in particular for residents of the Mackenzie Valley.

So any question of whether concerns expressed by the parties lie within the board's jurisdiction may be expressed by asking whether the ability to conserve water resources for the optimum benefit of residents may be impacted by our areas of specific concern. That jurisdiction has no time frame or end date, so future potential impacts must also be considered.

If, for example, the climate warms sufficiently that passive cooling cannot maintain the frozen shell, then the question of whether resources are available to operate an active cooling model could impact the ability to conserve water resources for the benefit of residents. Therefore, the availability of long term funding to meet the project's ongoing needs is clearly within your mandate.

The project team is offering excellent professional work, but there are reasons we discourage anyone from marking their own homework. The need for transparency in matters of public interest are a part of why your board exists as an independent entity, and why even a federal project must undergo the same public approval process culminating here.

Slide 5

We are not only designing the built elements of the remediated site, but also setting tools in place to communicate to, and empower, future residents. Ensuring that there is a clear chain of responsibility for necessary action increases responsiveness and avoids the bystander effect.

Involving the larger impacted communities not only aids long term communication, but can add valuable redundancy. If local students learn how to do water monitoring, in response to suggestion 3 from the Environmental Assessment, it will expand local technical capacity to spot potential problems.

These principles: directly involving impacted communities in order to strengthen the project, and ensuring that the responsibility for certain actions is clearly defined, apply to many aspects of the Remediation Plan.

Slide 6

The project team suggests that what they need is for Closure and Reclamation Plan concepts to be approved by the board, and that the details will follow. We agree that fundamental concepts and principles should provide guidance to design specifics, and want to ensure that all necessary concepts are included. A discussion about the site's appearance has been going on for years which sounds a little like this:

Shouldn't we be trying to return as much of the site to its natural, pre-development state as we can as a measure of respect to the land and its people?

I don't know. Maybe we should make it look as forbidding as possible. If we make the site look attractive to wildlife, recreational, and traditional use that exposes fauna and residents to increased risk, would that truly be a measure of respect?

What if we avoided making these decisions about the site and leave that for future generations to decide for themselves? Could we do that?

We could, but we probably shouldn't. If the final appearance of the site sends mixed messages or contradictory ones to future generations, our capacity to clearly communicate what they need to know will be diminished.

Slide 7

We won't resolve that here today, and both positions have merit, but decisions about the site are already being made, and they will impact its final appearance. That appearance will, intentionally or otherwise, make parts of the site either more or less attractive to specific uses. We believe our current knowledge of the site empowers the project to make the best-informed decisions about appropriate site uses within the available financial envelope. We can encourage or discourage specific potential uses through design elements. At best, those who come after us will understand how to stay safe in the vicinity of the site. At worst, a piecemeal approach to design elements will fail to take the opportunity to help them do so. Failing to consider in a consistent way how the site aesthetic will encourage or discourage specific potential uses would be a lost opportunity to create the best final design.

Slide 8

Undefined design details are not our primary concern with the Closure and Reclamation Plan. What seems most vital is the question of how the closure and reclamation plan intends to define and measure its success. As currently proposed, the CRP measures success with the design elements themselves: does the finished product reflect the detailed designs created by the experts?

Slide 9

That is worth measuring, but fails to ask whether the final product will successfully accomplish what those designs were intended to bring about. Are we measuring that plans were followed, or measuring that they work? We want to see robust designs developed and implemented, but also wish to see tools for assessing the effectiveness of those designs after implementation, ideally linked to defined contingency plans and available resources that might meaningfully address any potential shortcomings that may reveal themselves.

Slide 10

It lies outside of the scope of our expertise to adequately define how approval might be provided which allows necessary work to begin while still ensuring that final elements are approved in a transparent way, but we are confident that the expertise to do so effectively lies within the capacity of the board and the proponent.

Slide 11

Where decisions about physical elements of the site such as the underground workings are concerned, thus far we feel that most of those seem on track, and we appreciate the project's responsiveness to community input.

Slide 12

The frozen shell model is a credible interim mechanism for reducing risks, but, it cannot be overstated that to ultimately protect the local watershed over the long term will rely on continuing research into a *permanent* solution.

Slide 13

Recent engagement on borrow decisions has improved our confidence in that aspect of site design, largely by collectively identifying a list of priorities and principles to guide further planning. Here again we can see that a consistent overall site concept would be further instructive.

Slide 14

You can cross the boundary into the site without knowing it, and even if you couldn't, contamination is not contained within the site boundary. Site risks are not localized, but regional, and the distribution of contamination may change over time.

We see value in the current mapping of contaminated soils, and recommend the Project commit to re-mapping areas of contamination at regular intervals. This would keep locals up-to-date on any changes, and provide a reminder of the ongoing risks.

Slide 15

A fence is not permanent. It will not define the boundary between safe and unsafe areas. Additional research into reducing those risks seems merited.

Slide 16

With world emissions trending towards the worst case IPCC RCP 8.5 scenario, and recent research indicating that this may be optimistic, AN is pleased that updated calculations of probable maximum flood will inform design parameters, and appreciates the project's diligence in this regard.

Slide 17

As borrow ties directly into decisions about pit filling and other site appearance factors, this is another area where we feel an overall site appearance plan would help to inform good decision making. We are pleased with the engagement efforts thus far.

Slide 18

To maximize the resilience of the site, AN believes that the energy needs are best provided without dependence on outside inputs that have to travel long distances.

Slide 19

(requires no comment)

Slide 20

In our search for ways to magnify the impact of our efforts, we found a prime example of an approach to a complex technical challenge that made the best use of limited resources: the XPrize.

By offering a ten-million-dollar prize for a solution to a complex technical problem, the Ansari XPrize inspired more than a hundred million dollars to be spent on research independently, while risking nothing if no solution came forward. When we recommended establishing a similar research prize for arsenic management solutions, the project team's response was that we should direct our recommendation not to the project, but to GMOB, the Giant Mine Oversight Board, because GMOB is charged with how research funding is to be implemented. Unfortunately, if GMOB loved the idea of instituting such a prize, they would be powerless to implement it, because they lack access to sufficient funds.

AN recommends that the board either require research funding commitments be expanded to allow for such an approach through GMOB, or that the Project incorporate a research prize fund as a separate item. The source of funding could be the savings achieved by implementing the technical solution.

Slide 21

Alternatives North considers the Deloitte report on long term funding woefully inadequate.

More than one party has asked more than once for clarification of why exactly maintenance and operations costs are expected to significantly decline, but it remains unclear. Will labour or material costs suddenly plummet, and if so, why? Does equipment commonly require significantly less maintenance the older it gets?

The report also assumes that all future governments for the next century will unfailingly maintain both willingness and ability to support the project's needs through annual appropriations requests, but we can see examples of new governments abandoning the commitments of their predecessors. On April 12th, I asked a Deloitte representative why predicted economic impacts of climate change were not considered within the report's assumptions. The person replied that for all we knew, the impacts might be positive. This is not what expert opinion in economics is telling us. They suggested that they would consider adding a single line mentioning climate change in the conclusion. That does not represent a serious response to our concern as best practice and due diligence.

Slide 22

Once again, Alternatives North believes that the board has both jurisdiction and obligation to consider how long term funding availability may impact the conservation of water resources for the benefit of future residents.
(15 min)

Slide 23

In the event of potential problems at the site, risks can be mitigated if residents are well informed and confident that they know what to do in response. The creation of a handbook for identifying risks, any warning signs of potential increased risk to look out for, and protocols for conceivable events would be a cost-effective way to grow public confidence in community responsiveness to happenstance.

Slide 24

If we're remediating water to drinking water standards, then we should also measure drinking water concerns like sulphates.

Slide 25

Although the suggestions which emerged from the Environmental Assessment process are voluntary, we encourage project discussions to continue to include them out of a desire to produce the best plan possible.

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Slide 29

To summarize, Alternatives North recommends approval of the water licence in a manner which permits work to begin but retains public transparency around approval of final details.

We recommend that the closure and reclamation plan consider appropriate site use decisions in advance to create a consistent overall site appearance. And incorporate a way to measure success beyond successfully following engineering designs.

We recommend an approach to long term funding discussion that acknowledges the impacts of climate change on our economy and improves public confidence in the project's ability to maximize responsiveness to changing circumstances.

We recommend requiring that research funding be expanded to allow for more diverse research approaches AND research into ways to better remediate contaminated soil.

We recommend creating additional tools to provide local communities an active role in areas such as water monitoring and potential emergency preparedness, and a study on meeting the site's energy needs renewably and locally.

We recommend that the board hold this project to the same standards that they would if a private business brought this proposal before them. We want to see movement forward, but would consider a longer process worthwhile if it meant the prospect of a better final product.

And we respectfully thank the board and everyone else here for your time.