

**Verbatim Minutes of the Giant Mine Oversight Body Society
SEMI-ANNUAL MEETING
May 31, 2024, 1:00 pm (MT)
Yellowknife Historical Society Museum**

In Attendance:

Giant Mine Oversight Board

David Livingstone – Chair
Ken Hall - Director
Mark Palmer - Director
Marc Lange – Director
Ken Froese – Director
Ben Nind – Executive Director
Paul Green – Contractor

North Slave Métis Alliance

Marc Whitford
Alan Alex

Yellowknives Dene First Nation

William Lines
Sihal Shafqat

Alternatives North

Gordon Hamre
Katharine Thomas

City of Yellowknife

Shelagh Montgomery
Kerry Thistle

Government of Canada

Natalie Plato
Candace Ross
Katherine Ross
Geneva Irwin
Nicole Garbutt
Chris MacInnis
Andrei Torianski

Government of the Northwest Territories

Erika Nyssonen, Diep Duong, Jeff Rosnawski

Welcome & Introductions

- David: Let's get started. Welcome, everyone to a face-to-face meeting with most folks here. We have a few on Zoom call. I will start the meeting by just doing a quick roundtable of introductions, because I don't think everybody knows everybody.
- Jeff: Good afternoon. Jeff Rosnawski. I am a technical specialist on the Giant Mine Remediation Project with GNWT Environment and Climate Change.
- Diep: Hello. My name is Diep Duong. I am with the Department of Environment and Climate Change, GNWT.
- Erika: Erika Nyssonen, Senior Advisor, GNWT.
- Andrei: Andrei Torianski. Manager with CIRNAC.
- Candace: Candace Ross, Regulatory Manager with CIRNAC.
- Natalie: Hello, everyone. Natalie Plato, Deputy Director, CIRNAC.
- Geneva: Hi, everyone. Geneva Irwin, Acting Engagement Manager for CIRNAC.
- Nicole: Nicole Garbutt, Acting Community Consultation Officer with CIRNAC.
- Gordon: Gordon Hamre with Alternatives North.
- Ken H: Ken Hall, Director on GMOB, and I'll say no more for the rest of the afternoon.
- Katharine: Hi. This is Katharine Thomas with Alternatives North.
- Marc W: Mark Whitford, North Salve Métis Alliance President.
- Ken F: Ken Froese here with GMOB.
- William: William Lines, Yellowknives Dene.
- Shelagh: Shelagh Montgomery, Consultant to the City of Yellowknife.
- Mark P: Mark Palmer, GMOB Director.
- Paul: Paul Green, Contractor
- Ben: Ben Nind, Executive Director, Giant Mine Oversight Board.

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

- David: Can I get those on the Zoom call to introduce themselves?
- Chris: Hey folks. It's nice to see everyone. Chris MacInnis. I am the Director of the Giant Mine Remediation Projection with CIRNAC, coming to you from Ottawa this afternoon.
- Katherine: Hi. It's Katherine Ross. I am the Integration Manager with CIRNAC.
- Alan: Hi. This is Alan Alex with the North Slave Métis Alliance.
- Marc L: Marc Lange, Director with Giant Mine Oversight Body. Sorry I could not be there in town. I had some family commitments.
- David: Thank you, and Ken Hall, I will give you permission to speak from time to time. I am David Livingstone. I am the current Chair with GMOB.

Approval of Agenda and Prior Meeting Minutes

- David: I guess what we should do is go through the agenda and see if there are any changes people would request. If not, I will ask for somebody to move approval. Are there any changes?

(Pause)

Alright. Can I get somebody to move approval of the agenda?

- Erika: Erika will move.

- David: A seconder? Mark. All in favor?

(Pause)

Alright. The minutes from our previous meeting. Everybody has a copy. They are verbatim, as the minutes from this meeting will be. Are there any concerns, omissions, errors?

(Pause)

Alright. Then I will get somebody to move approval of the minutes. Mark.

A seconder?

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

Natalie: I'll second it.

David: All in favor? Alright.

Review of Action Items

David: Action Items are at the back of the minutes. I will just go through them. The first one is GMOB is to report back on the climate change comments to be submitted to the Project by the end of March 2024.

Ben: That was done.

David: GMOB is to share the Giant Mine education material to date with Shelagh Montgomery.

Ben: That was done.

David: Shelagh confirms. Number 3: GMOB will submit comments regarding the acute QRA.

Ken F: In progress.

David: GMOB is to ask the Review Board about the 20-year review start date. This is to be shared with the Parties.

Ben: That was done. We received a response for an email question. They are asking for a formal letter from GMOB, which we will put to them next week, and they will weigh in as a board on that.

Natalie: Just to be clear, that was not shared with the Parties though, right?

Ben: No.

Natalie: Okay. Thank you.

David: GMOB is to share future data with the Giant Mine Remediation Project for the newly extracted samples regarding moisture content and integrity of the cement paste logging.

Ben: Yes.

Natalie: Sorry, what do you mean, yes? Please clarify. I don't think we received that.

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

Ben: No, you have not received it because we have not taken any of the samples out yet. As the samples are being worked on, the moisture content will be registered, and we will share that with you.

Natalie: I think we were also looking to confirm our log data as well, as how we differentiate between paste and the trioxide dust to make sure for future extractions if we characterized it correctly.

Ben: Yes. We have asked SGS to track that as well. They have put it into our storage container and have logged it, as per the log that you provided to us for the samples that were taken out. As they are going through those samples right now, we have an extraction of those samples to be sent to one of the laboratories. As they are going through that, they will confirm it. Thank you.

David: Thanks, Ben. Action Item 6: YKDFN is to report back to the Parties to the Environmental Agreement on the status of YKDFN with the YK HEMP Program.

William: I did look into this. It is my understanding that our Wellness Division, and the YKDFN as a whole, is negotiating on the funding, so we are not fully pulled away from the YK HEMP. There are just some negotiation items that need to be finalized. Then we can continue as usual.

David: Alright. Thanks, William. The final Action Item: YKDFN and North Slave Métis Alliance are to recommend a possible facilitated reconciliation session for all members of the Parties to the Environmental Agreement. Is there an update from either of you on that?

Marc W: Sorry about that. That is still outstanding yet. I have to talk to Alan Alex about that and just get a bit more update as we move along. I think Alan Alex is on the call here.

Alan: Yes, and we do not have an update for that as of right now.

David: Okay. We will add that to the Action Items coming out of this meeting, and Action Item #5 as well and #4, in part. Are there any additional comments on the Action Items?

(Pause)

Roundtable: Successes, Concerns, and Priorities.

David: Hearing none, the next is roundtable highlights from each party: successes, concerns, and priorities. Alternatives North?

Update from Alternatives North

Katharine: Hi. This is Katharine. I am going to speaking on behalf of Alternatives North. I just want to recognize that Michael Nabert really wanted to be here and unfortunately was not able to make it. He has been involved in the bulk of the work for A.N.

First, I read an article that GMOB had worked on with Cabin Radio. I was happy to hear that there are some good updates coming out of the research that GMOB is overseeing. Apparently some good questions came out of the public meeting yesterday in Ndilo. It is good to hear that the results look promising, and a solution to the underground arsenic is something that Alternatives North is very interested in.

Regarding the Perpetual Care Plan, we are looking forward to the announcement of a contractor, and we are looking forward to working with this contractor on the Perpetual Care Plan.

The big change between this semi-annual and the last one is that we are finally seeing positive work on the Climate Change Assumptions File. Michael has received the Revised Climate Assumptions document and is keen to dive into the details of this. He is very excited about that.

Another update is that a framework is currently being developed to commission an assessment of how climate change might impact the long-term financial needs of the Project. This is being worked on by Michael, and we have also engaged Karen Hamre to help with developing a request for proposals for this work.

As for reviewing the management and monitoring plans, that is ongoing. We are reviewing multiple management and monitoring plans, mine plans, annual reports, updates, and other documents related to the Remediation Project. Finally, all three of us, Gordon, Michael, and myself, are looking forward to the site tour that is coming up on June 13th. Do you have anything to add? Okay, thanks.

David: Alright, thank you. Gordon, do you have anything to add?

Gordon: No, nothing to add.

David: Yellowknives Dene First Nation, William?

YKDFN Update

William: Thank you. I don't have too big of an update. We have been working closely with the Project on the initiatives in the past. We were happy to finalize the DFO process, and we got our comments submitted and that process capped off. We have been having regular meetings on the Procurement Framework Agreement. Silal, our Ec-Dev Director, has been heading that. Aside from that, we have been working on our regular initiatives.

This week has been pretty busy for the Yellowknives. I am not sure if anyone has heard, but we have a missing band member. Ralph Beaulieu is missing on the highway. It has kind of been all-hands-on-deck looking for him. Things have been both stressful and busy for us. In the past couple of days, we also had Mackenzie Valley meetings, so it has been a pretty busy time.

Aside from that, we have some priorities. We did send a letter to the Project just recently on legacy planning. We want to have some discussions and talk about the future of Giant Mine, where we see it, and have some conversations on that.

As usual, as I gave the update last time, we also want to find time for GMAC. I know I said that last time, and we have not had any GMAC since then. We had one, but that is still top of the list. I do want to get that going.

Then for concerns, I was talking with Geneva earlier about this. It was very concerning to see the Project and AECON have the Tlîchô onsite to do the site ceremony just a couple of days ago. Unfortunately, I could not make it that day, as I was in the Mackenzie Valley meetings. From what I have seen, the Tlîchô were out there, and it was primarily them. I think there was mention of one band member from the Yellowknives Dene.

In this day and age, after the many years of working with the band, it is pretty disappointing to see the Yellowknives not there doing the ceremony. I recognize that there was some miscommunication. It seemed like AECON kind of took the lead on it, but it was disappointing for our chiefs. It was disappointing for Johanne, and myself as well.

I am going to be following up after this meeting working with Geneva to rectify this, because our chiefs were pretty upset to see that. Just as a band member, I felt pretty upset. I should not have to give an update on the legacy that Giant has caused our people. You know, there have been deaths in our community, and it has poisoned the land surrounding this area. If there was a mine outside of Behchokø or a kilometer outside of Behchokø, it would not be right for us to go to Behchokø and say this is our traditional territory, and we bless this land. That would not be right at all.

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

So, when we see the Tlîchô doing that, it is very upsetting to our people. I recognize that there was some miscommunication, so we want to work with the Project to ensure this does not happen again. I just wanted to make that known. Fred called me last night about it, and then I was talking to Johanne too. We don't want to go off the path, the good path that we have been on. That is it for me. We will see.

David: Thanks, William. I will just add that apparently there was some miscommunication between GMOB and the YKDFN for the meeting last night. We apologize for that.

William: No worries. Thank you, David. Yeah, for last night's meeting, I don't know if the invite got lost in cyberspace or what, but I did not get anything in my inbox. I did not realize the meeting was even happening a block away from my house.

Natalie: Thank you for that, William. We definitely agree with you that we want to maintain our relationships with the Yellowknives. It is critically important to the Project. I just want to provide some additional context to the rest of this group.

When we set the blessing, we did approach William first, and the Yellowknives picked a date and were going to be the lead on it. It was supposed to play out that way, but we did have a last minute cancellation and were not able to reschedule. We did check in that we were going to proceed, and the Yellowknives gave our blessing to proceed.

Unfortunately, it turned out that you were not comfortable with us proceeding in that way, but we look forward to maybe doing another site blessing with the Yellowknives. Hopefully this time we can make it work. Yes, definitely we agree with you that we recognize that we are on Chief Drygeese territory. With that, I will pass it over to Geneva.

Geneva: I just wanted to add that I think the site blessing was intended to be for everyone, all of our Indigenous partners. I did reach out to Marc as well. Maybe it is my ignorance showing that I was not as sensitive as I should have been, so my apologies. Certainly, we wanted to try to involve all of the rights holders in that ceremony, and that was our goal.

William: Thank you for that. I should have added that I was under the assumption that the Project would have used our members. In the past, when we have these last minute cancellations, the Project has a relationship with Ted, Angus, and Peter, so I was under the assumption that at least some of our members would be used. When I see the 7 or 8 drummers that were there and 90% of them were Tlîchô, it was like, whoa. It was upsetting. I recognize that we had a last minute cancellation. The chiefs had to leave town. There was something that came up for them. These things happen, but we are here to make sure it does not happen again.

David: Thanks, William. Marc?

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

Marc: It was one that I attended, as well as Robert Mercredi who was born here in Yellowknife. Anyway, it was sad that not all the parties could be there, for different reasons. It was a nice day. It was a nice ceremony. I think, like you said, it was not an even mix of drummers and stuff like that. It would have been nice to have that, an even mix of drummers from Tlîchô and of course from YKDFN. It would have been really good to have.

Nonetheless, it took place. Everybody is trying and striving to do a good job. I think it is very, very tough, especially on the government and the Project heads to try to win their way through this minefield and try to sort of please everybody. I hope that YKDFN will take this to heart that everybody is trying hard to be inclusive, to work together. It is a large Project. There is a place for all, and let's not be divisive. Let's get together, as we should. That is where I am coming from, from the NSMA's part. Thank you.

David: Thanks, Marc. Ben?

Ben: Thank you, William, for speaking to it, as well as Geneva and Marc. One of my questions comes from a conversation that we had this morning. Is there a protocol that can be shared with everybody? The question that was raised to me was should I have written a letter to the chiefs to invite them to the Annual Public Meeting? Is there over-and-above contacting you as the representative for the Party to the Environmental Agreement? Is there something else that could have been followed in terms of those invitations? Right now, I don't invite the chiefs to any of the meetings. I am going directly through you.

William: No, I think that is appropriate. I think the problem...you are referring to last night's meeting? The problem was that I never got an invite whatsoever for last night's meeting. Had I got an invite, I would have posted it on our Facebook site, because most of our target audience for YKDFN members use Facebook. The second I got the invite, I would have put it to Facebook, and then a large amount of our members would have seen it. If it is a very important meeting that I think the chief should be to, then I will forward it to the chiefs into their EAs. More or less, if the invite does not come to me, then that is the problem.

Ben: Okay, great. Noted and thanks for letting me know what that process is after you receive it.

David: Thanks, Ben. North Slave Métis Alliance?

Update from the North Slave Métis Alliance

Alan: Good afternoon. This is Alan from NSMA. Since the last GMOB Semi Annual Meeting in January 2024, NSMA has gone through several updates regarding Giant Mine related files, so bear with me if I am taking a bit of time to go through my notes here.

NSMA, along with the Elders and members, have participated in all relevant meetings, including working groups, socio-economic meetings, and YKHEMP from Jan 2024. One significant update regarding YKHEMP is that NSMA signed a separate data sharing agreement with the University of Ottawa. This ensures that NSMA's data remains safe and solely under ownership with our joint holding. We appreciate YKHEMP team's efforts and working with us to finalize this agreement.

Additionally, on March 6th, we hosted our annual Giant Mine Community Forum, and we extend our gratitude to the entire CIRNAC team, including Geneva, Natalie, and Andrei for taking the opportunity to engage with us during the session.

For the Giant Mine site visit for the NSMA members for this year, we have finalized the date. The site visit will take place on June 14th, just after our working group site visit. We thank CIRNAC for their coordination efforts.

With regard to the Giant Mine Community-Based Monitoring Program, we recently received our research permits from Aurora for the monitoring work. We plan to conduct a test field outing in the third week of July and are currently working with the consultants on training needs and planning.

I also have some updates from our Environmental Department manager regarding capacity building and staff in the economic development part. I am going through his notes now. NSMA has been involved in a variety of capacity building activities led by our NSMA Environmental Department and our leadership through funding sources, the NSMA and Giant Mine Community Benefits Agreement. We also work with other federal programs and territorial programs for capacity building.

The capacity building includes hiring and training of staff and community members for the environmental work relating to the remediation economy. We acquire key assets that will assist NSMA in participation and creation of new operational units within NSMA organization co-companies. We also funded Metcor Environmental in winter 2024. The company is 100% owned by NSMA, and we combine resources with NSMA's local staff. Those are technical partners trained in environmental and GHD. We provide environmental and engineering services to remediating the mining sector.

Metcor also has an additional (*inaudible*), including demolition and decommissioning structures, physical remediation services. Together, the Metcor group of companies can

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

offer a variety of services for major project-wide Giant Mine. We are also currently working on (*inaudible*) monitoring with Trident Environmental at Giant Mine. This is a one-day week program. We have boots on the ground in Giant Mine. The work started in April 2024 and will run until the end of August. We want to expand our scope of work on the side with old partner companies. Metcor recently announced it would like to partner to build powerlines at GMRP.

We are also trying to raise funds to build a multi-purpose environmental facility to house Metcor Environment's operation with CanNor. We are finding that staff lodging is a major concern, and we need to create this capacity to be able to execute our own work. We also need housing to create local jobs and move jobs to Yellowknife instead of just fly-in and fly-out so that more dollars can be spent in the community.

With regard to staffing, we also hired an environmental officer in March 2024. Our candidate has prior experience at Giant Mine and was a firefighter with Parks Canada. This multirole position will support NSMA and with current environmental field work capacity plus consultation and engagement.

We also hired an NSMA community member for the summer to assist field work. We would like to train them to work onsite at Giant Mine and on other projects. Other capacity building initiatives include creation of an in-house NSMA fire response strategy to increase community safety and protect staff. We have trained staff in wildland firefighting with GNWT adding related certifications to chainsaw operation and purchasing quality firefighting gear and PP for the community. In the future, fire logistical services may be a potential business offering we can provide. We also purchased several pumps, hoses, and sprinklers with support from CIRNAC. We are creating protection for the camp at Old Fort Rae and NSMA offices.

Overall, I would say Giant Mine funding is supporting training staff year-round, and we are running roughly 10 field programs this year, and potentially more depending on which contracts we win. In general, each field program has training and capacity building components built into it. Staff and community members learn on the job, and we purchase gear and equipment with each project so we can grow our abilities. That is all our updates in terms of staffing, capacity building, and regulatory and YKHEMP related updates.

David: Thanks, Alan. That does not sound like you are nearly busy enough. Marc, do you have anything to add? I hope you are paying this guy overtime.

Marc: (*Inaudible – off mic*)

David: That is it for North Slave Métis. We are moving along fairly quickly. Shelagh with the City of Yellowknife is next.

Update from the City of Yellowknife

Shelagh: Thank you. This will be a rather quick update compared to that one. It has been fairly quiet on the City front. We have had a couple of bilateral meetings with the Project Team. Those agendas have been, fair to say, pretty light in the last few months since the last Semi-Annual Meeting.

Here, there is mostly discussion back and forth of trading of equipment that was used in the City to create fire breaks last year, quite a bit of which came from the Giant site.

Otherwise, on the Health Effects Monitoring Program, the data sharing agreement was resurrected. I guess it had been initially drafted in 2018 and had kind of gone by the wayside. That was brought forward I think by the committee in the spring, and the City signed off on it. I am not sure if it has been finalized or if any of you know, but I have not heard from Shin Shiga who is the City rep on that committee. The City did share the data sharing agreement related to that Health Effects Monitoring.

David: Alright. One thing I have forgotten. If people have questions of the presenters, don't hesitate. I forgot about that part. Natalie?

Natalie: I will just update you on that data sharing agreement. I think it is on the shelf right now pending some concerns with all the other parties signing it. I think it is under review, so stay tuned.

Shelagh: If I could just note also, I know that Kerry Thistle, the main lead at the City, is planning to participate in this meeting as well. She is going to join around 2:00. She sent an email to Ben, so if there are any serious City questions, you can wait until then.

David: I hear the City has hired a new employee.

Shelagh: I just heard that on the news yesterday. An ex-CIRNAC bureaucrat.

Chris: If I could just jump in on that, I just want to congratulate the City. That is an excellent hire. Steve Van Dine was our former – Natalie, Katherine, and my former Assistant Deputy Minister. He is an amazing guy. He is engaged. He is from the North and loves the North, and he speaks for the North. I think he is going to do some good things for you guys. Nice hire.

Female: *(Off mic – inaudible)*

David: Isn't he supposed to be retired?

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

Chris: This would be a dream job for him. He is an urban planner, and this is right up his alley. I am sure he is tickled pink by this.

David: Thanks, Chris. Are there any other questions or comments for the City? Okay, GNWT.

GNWT Update

Erika: This morning, I updated GMOB on the status of the boat launch and town site area. I won't go through that again, but if people are curious, come talk to me, Jeff, or Diep, and we can tell you about who is responsible for what. In a nutshell, Jeff has been working really hard to get the signs installed out there. I just took a walk around at lunch to let people know that GNWT is the one responsible for the boat launch parking. We are currently exploring ways that we can rectify the low water issues at the ramp. Can we extend the ramp out? Should we drop the tires? Things like that. We are working on that.

Another thing to mention is through our department, ECC: Environment and Climate Change, which is likely very confusing with Environment and Climate Change Canada. Through that, we have a program, CIMP, and they do a lot of funding of research. One of the hot topics that we have seen in media recently is looking at wildfire impacts on remobilization of arsenic from the soils and dust, or wherever it is.

CIMP is actually funding a 3-year research program on that. I think I can say, and people have probably heard, but it is led by Mike Palmer, who is one of the arsenic gurus in the North, along with Heather Jameson. That is research that he will begin as soon as I guess he gets the dollars. That is exciting to see what that is going to tell us and how wildfires are affecting arsenic remobilization.

Another thing to mention is what has come up in the recommendations about the constraints map. We talked a little bit about it this morning. Just to reiterate, an email did go out from Geneva a while ago to the working group that we did meet with the City a while ago. This was led by GNWT because of the role we have with being a landlord, but also in land use planning.

Just to be clear, GNWT has a role in land use planning on a regional scale, so we are not involved in municipal land use planning. That is the City of Yellowknife's responsibility. As a project, we have provided all the information about the constraints at the site. GNWT, along with mandated departments such as Lands at the time, and MACA, came. We met as a group. Everyone is aware of each other's responsibilities. The City in that meeting said, "Thanks very much. We have everything we need to proceed with our next community..." That was what I was actually looking up. I can't remember what it is called. Is it a community development plan, Shelagh?

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

- Shelagh: Community plan.
- Erika: Community plan in 2028. So, based on the information the Project provided, the City would look at how to include some of that already in the 2028 plan. Looking longer term, that is when they will start actually doing some work.
- From a Project and a GNWT perspective, we can kind of say okay, we have done our part, and now it is up to the City. The Project has always committed to being part of that process and providing information, but that is where things are with that. I just wanted to provide the opportunity. David?
- David: Before I lose track of this, you said this morning that the City no longer has a lease on the property and has no guarantee that it will get a lease post-remediation, so why would the City be interested in land use planning at this point?
- Erika: Because they expect to have the land in their hands. The lease is suspended. I guess my wording was not right. It is like a pseudo-guarantee. They don't have their lease in hand, so I did not want to make the assumption that no problem, there are going to be no issues. I think it is also dependent on land negotiations with the Yellowknives Dene as well. The City at the time said, "Of course we would be including YKDFN," but who knows at the time. It might be flipped where YKDFN owns the land. I am not sure, so I am just trying to keep it without being too constrained.
- David: The reason I ask is we keep bringing this up as GMOB. We are under the understanding that it is the City's lead. I don't know what Shelagh's opinion would be on this, but if I was in the City's place, I would wait rather than spending resources on a land use plan that the City may never implement because it does not have an interest in the land any longer. From a GMOB perspective, we may be beating a dead horse. I don't know. Shelagh, do you have any comment?
- Shelagh: The only thing I know from discussions with the City, as Erika mentioned, is the 2028 date, which is a little bit out there. I don't think the City is rushing around working on planning for that site until knowing, for one, to see where the remediation has advanced to. I would say probably two years out from the 2028 date to begin working on that updated community plan. Then maybe something further will be known about negotiations with YKDFN or availability or potential turning back of that lease to the City.
- Diep: I believe in the plan that you guys have now with the City, it says that land is being remediated, or this area is being remediated, and nothing is going to be done at the site until remediation is complete. I don't know if the plan is still to start talking about the site in 2028 or perhaps it is until 2038 when the Project is actually completed.
- Erika: Just to clarify about the City during that meeting, and if anybody else in the room was there, my understanding was the City would signal to it in their 2028 plan, not to carry

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

out massive land use planning exercises, including a comprehensive detailed plan in their 2028 plan. It would be to say hey, right now in our plan it says this is undergoing remediation. The 2028 plan would be to tell people just a little bit more, but that land use planning exercise would come further down the road. Maybe this is a nice action for Shelagh to inquire the thinking for 2028 and get a bit more understanding of the scope of that piece in there.

The last piece that I will add that might be of interest to folks is that as the Project, we have a Revegetation Taskforce. That is looking at what areas we are revegetating, but more so the opportunities for Northern businesses to be a part of that, either by providing services or supply. Also then, we can involve people in monitoring and actual application of planting and things like that.

I have connected Parsons with our GNWT agricultural staff along with the NWT Agricultural Association, and they had a great meeting. There are a lot of opportunities there that they are excited to explore. They are looking at existing farmers that are already doing stuff that could provide some supplies and some other ideas about utilizing programs and services already happening or starting up. I was not part of that meeting, but they plan to come back to the taskforce to talk about some of those ideas. That is encouraging. We are just trying to loop in that expertise in our government to that. I will just end there. Thanks.

David: Thanks, Erika. Shelagh?

Shelagh: I have just a quick question coming back to the meeting you mentioned about the planning. Is that still that meeting that was in 2022? I was wondering if there had been something since then. I am just looking at the minutes from that meeting. Yeah, I can undertake to try to create a paragraph or two for the next meeting, or maybe it could get sent out before the next meeting based on discussions with the City, follow-up and clarify that. There seems to be a fair bit in these minutes as I reread them, but it will be good to confirm since it was two years ago.

David: That would be great. Thanks, Shelagh. Natalie?

Natalie: Thanks. I just wanted to clarify something because Erika covered a lot of good information there. Thank you, Erika. In Erika's update, she was wearing two hats. It is something that we are trying to get very clear, these dates. The Giant Mine Remediation Project is not responsible for the leases in the town site area or the maintenance and upkeep of the boat launches. We have been getting a lot of requests for that lately, so we are just trying to be very clear. When Erika talks to that, she is putting on her GNWT Lands hat. I just wanted to clarify that. Thank you.

David: So, all these signs that are going up on the waterfront say "Call Erika?"

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

- Erika: They say call Giant Mine, but not the Giant Mine Remediation Project, not as members of this team but as members of the Government of Nunavut – sorry the Government of the Northwest Territories.
- David: Give it time, and it might be the Government of Nunavut. William?
- William: I just have a question on the Revegetation Taskforce. Is that for the Project, or is that GNWT-wide?
- Erika: Sorry, hats on and off at the same time. That is for the Giant Mine Remediation Project. That is a project-led taskforce. For GNWT, we are trying to loop in connections that we have to help inform some of the procurement opportunities with Parsons through that taskforce. Just to be clear, that is an internal Project working taskforce.
- William: Thank you for that. I think that when it comes to reveg, there is a lot of Traditional Knowledge that could be used. Despite it being an internal taskforce, I would like to request the Yellowknives Dene participation in that Reveg Taskforce. What I have found with my experience is the earlier that we are involved, the less we have to deal with later. If we get involved earlier, then we can say which plants we would like to see and which ones we know will thrive. Our Elders know the landscape. We know which plants will work, and we know which ones won't, so we would appreciate being on that taskforce.
- Natalie: Point taken, William. We did do a big session out at the Yellowknife River last summer with your Elders where we did gather that information. We think at this point, we have what we need to develop the designs further, but yes, noted. We will see what we can do.
- David: Thanks, folks. As we are motoring along here, next is the Government of Canada.

Government of Canada Update

- Candace: Okay, I will start with regulatory. Thank you again to everybody who participates in all of our reviews and reads through our thousand pages of documents that we submit to the Land and Water Board. It has been a pretty busy year the last year, and we are not really slowing down.

Right now, we have our open pits design plan out for public review. We have three more design plans to do, so we will do them one after the other in the next year. We are also at the same time preparing quite a few submissions that we need approval for before we can start using the water treatment plant. Right now, commissioning of the new water treatment plant is in the summer of 2026, which gives us about 18 months to get

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

our AEMP design plan and our water management plan updated. That is what you can look forward to seeing in the next year. That is all that I have.

Geneva: I am sure you have all heard me say this, but there is a boater meeting here at the museum from June 11th from 7:00 to 9:00 p.m. We will be talking about the outfall and water work that will be going on this upcoming summer, as well as our plans in the phased movements between the two docks. We will go into depth about those, as well as some more in-depth design plans for the docks, the wharfs. We have some less technical and more technical drawings, so everybody can be involved in that. Tell your friends. Post it on Facebook.

That is my main update for this area. In terms of the Perpetual Care Plan, I think everybody is aware that we have been working on evaluations for that. The evaluations are complete, and they are wording that contract as we speak. There should be an update coming out to the taskforce and the working group, hopefully Monday but maybe Tuesday, with the successful bidder for that contract. Then there probably will be a consultation shortly thereafter to start getting to work on that. Yeah, I think that is it for me.

Natalie: Reveg is coming. I have nothing, other than I did miss something on the agenda. One thing I think we should discuss as a group is the appointment of directors. Normally in the Agreement, we said we would talk about what expertise and things are needed. I noticed three members are coming up for renewal very shortly, so I think we should add that discussion. My apologies for not catching that sooner.

David: Done. It looks we have had a little bit of time, so I will just add it. Ben had to step out. He left some incredibly valuable document in Ndilo last night, so he is on his way to retrieve it apparently. We will go through the director updates and probably take a break at about a quarter after, because I want Ben to be here toward the end of that discussion. We will start with Ken Hall. I said I would give you permission.

Update from GMOB Directors

Ken H: Something that came up recently, and far be it from me to pick out minutiae, but it is something that I think is important when you talk generally and with the public. I reviewed some documents for one of the researchers. His name escapes me right now. He was talking about arsenic, and he was talking about mine waste. I explained to him the difference in terminologies, and I think it is an important one because you hear people talk about mine waste and right away the inference is bad. There is something wrong with it. It is contaminated. You have to handle it with care.

In the mining industry, mine waste was called mine muck. When they say it is waste rock, it is just the rock that was dug out to get at the gold, so it is not necessarily a bad

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

thing. It is often framed in the context that mine muck or waste rock are bad, and that is not the case.

Half of Yellowknife is paved with mine muck. It was a cherished commodity by the local contractors because of the fact it contained a lot of rock flour, so it packed when you wet it just like concrete. It was a really excellent building material, but it contained no arsenic. The arsenic was associated with the gold. So, it is really important when you talk or hear about mine muck versus waste rock that it is not something to be concerned about. That is just a little bit of trivia for the day. That is all I will say.

David: Thank you, Ken Hall. Are there any questions for Ken Hall?

(Pause)

Then we will move to Ken Froese.

Ken F: I think the only real update I have is just the status of the YKHEMP, which everyone here is really aware of. We anticipate getting the next round of data from U of Ottawa sometime in the summer or early fall. That should give us a better idea of how things progress over years. The first round of data was 5 years ago. This is happening now, so it will be our first indication of whether anything has changed or not. I think we are looking forward to that.

David: Thank you, Ken. Shelagh?

Shelagh: I have a quick question, Ken, related to that data sharing agreement. Are you able to say anything about that? I have not had follow up from Shin Shiga who is the City rep on that. Obviously, I wasn't aware that it was still shelved, and maybe only the City had actually signed it.

Ken F: GMOB is not able to sign that type of agreement. We were going to clarify that with the U of Ottawa team. Then at the last YKHEMP meeting, it was apparent that many other organizations were not comfortable signing it or not able to sign it for legal reasons. I will leave it at that.

I will add that U of Ottawa is working very hard to set things up with both NSMA and YKDFN so that the concerns that both groups have in terms of data ownership are being addressed. The current status is that effectively, the Terms of Reference Memorandum of Understanding is the approach that we are taking right now.

Natalie: If I may add, when I said shelved, I did not mean it was not happening. I just meant many parties were not signing, and it would be a direct agreement with U of O and the rights owners. Just the rest of the partners would not be signing it. I guess at the next YKHEMP meeting, we will probably get another update on that.

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

I'll just add to the YKHEMP update that Ken provided. The Yellowknives Dene sampling is scheduled to take place this fall, pending working out the budget issues William noted.

David: Not too late to cancel that signature, Shelagh.

Shelagh: *(Inaudible. Off mic)*

David: Before we start, I will just note that Graeme is travelling. He is going with a soccer tournament with a team he coaches here. Marc Lange is on the Zoom call, so I will get to Mark Palmer and then go to Marc Lange.

Mark P: I really don't have any updates to speed things up.

David: Yeah, we are really short of time. Marc Lange, you're on.

Marc L: Hey folks. For GMOB, the areas I have been focusing on have been on environment and permitting with a special focus on aquatics as well as the research program. I realize we are going to cover the research program later, so I will not say anything about it right now.

On environment and permitting, if you had a peek at our Annual Report, you can see under environment, we did not put forward any recommendations. We have some actions for ourselves and some commitments. Another way to read that is in our view, the permitting and the way the environment is being managed is done pretty well. It is following guidelines. It is following regs, the licensing. The engagement by the Project is through, so at this point, we have not tabled any new recommendations for this year.

The area that I am focusing a little bit more is on the new Aquatics Effects Monitoring Program, Version 3, I think the Project is calling it. It will start focusing more on Yellowknife Bay. We have been spending some time looking at how the Project is looking at developing the AEMP and then looking at the guidelines on how to do an AEMP that was put out by the GNWT and the Land and Water Board in 2019.

It is not totally apparent at this point where the background or the evidence is for the questions, the relevant questions that the AEMP might answer for Version 3 and the consultation that went behind it, coming up with a list of questions that would be answered and those that would not be answered.

We are looking forward to the meeting that we are going to have mid-June to continue that discussion and look at how the proposed AEMP will follow the guidance put out by the regulators. Depending on that meeting, we might also ask the GNWT and the Land and Water Board to turn their eye to the draft AEMP and do a bit of a conference check to make sure they are satisfied with the new AEMP Version 3 following their guidelines. That is what I am focusing on at this point.

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

- David: Thanks, Marc. Are there any questions of the directors so far?
- Erika: Marc, when you say ask GNWT to be involved in the review, does that look like a formal request from GMOB from yourself to me, or to workshop at the Waters regulatory proceeding? I am just curious how you see that playing out. I just want to be able to prep folks that a request would be coming.
- Marc L: I think we will probably be asking for, and I don't know how formal we want to make it, but a request to the folks who created that guideline to say hey, before we get to a hearing or an approval on AEMP, your guideline says you have got to do a bunch of stuff years before. Can you make sure that the stuff that is supposed to get done the year before is being done or that you've got the right evidence? The Land and Water Board is a little clearer. We would probably write to them or call them to do that concurrence, but GNWT, I am a little less clear as who held the pen or which ministry offered it. Lands and Environment sort of merged. It is a good question on that one. I had not thought of where that might land.
- Candace: When you say that you are going to ask the Land and Water Board in advance, I find that would be a bit unusual. I haven't experienced a time when they would review and give us comments back prior to an actual proceeding. I don't know if that is a process they would actually do.
- Marc L: That is also a good observation. You're right. I haven't seen anybody ever request a concurrence before the plan is actually tabled. This isn't to set off any panics. It is just hey, you have a guidance that says do stuff in advance. How do you make sure it's done? Surely we don't want to be at the 11th hour, file documents, and then the regulators say hey, you didn't do it the way we wanted you to do it, and now you are behind many months. I suppose this is what we are trying to avoid basically, a last minute concurrence that does not match the requirement. Yeah, it's a good question. I am not sure how we would go about and ask that at this point.
- Candace: I think when we get to the engagement, you will be able to see how we are developing the background documents. Those will be presented first. Then we would come back with the actual design plan. I think we have all the pieces, and we will walk through that when we get to the engagement in June here.
- Marc L: Great. Great.
- David: Are there any other questions or observations of Marc? As he said, he will provide a greater update on the research program in a bit. Paul Green? Nothing? Okay.

Discussion Regarding the 20-Year Review:

David: The 20-year review, I think we can start now. The Report of Activities I will leave for Ben because it is his report. We had a brief discussion this morning with the Project Team about when the 20-year review would happen. Natalie, do you want to just summarize where the Project Team is?

Natalie: From the Project Team's perspective, we went and we reviewed the Environmental Agreement. The wording in the Agreement says the 20-year review will take place 20 years after implementation. Our interpretation of that is that Project implementation began in 2021, so the 20-year review would take place in 2041. That is what we read and would like to see happen. Thank you.

David: My only observation is that there will be none of us around the table, I expect, at that point. Well, maybe Geneva. Maybe there will be two of you. Speaking personally, it's going to be a stretch. I'll definitely be on a different plane at that point to be sure.

We have not had a through discussion at the Board level about that. Ben has reached out to the Mackenzie Valley Environmental Impact Review Board to get its opinion. He has been asked to send a formal letter to the Board, and we will get what their view is on that part of the Environmental Assessment not long afterwards I hope.

From a personal standpoint, I think that 2041 is a long, long way off. I would be worried personally about corporate knowledge continuity of folks working on it. A 20-year review, what real value is it going to have at that point? The Project is done, or should be done. It seems to me that a 20-year review partway through might be more effective. I will turn it to the Parties and Ken Hall first.

Ken H: I have just a comment. The 20-year period is what it says in the Agreement. The Agreement is what we all agreed to. If we all agreed to do it sooner, there is nothing stopping us from doing it sooner, recognizing this may impact planning, etcetera, but there is nothing saying we cannot change that if everybody agrees to change it.

David: Thanks, Ken. Gordon?

Gordon: Thank you. I know that there are members of Alternatives North who have strong views on this. I will wait to respond on that question.

David: Yeah, I realize that folks are not really prepared to come to an agreement on this. Marc or Alan, do you have any thoughts at this point about the timeframe of 20 years and when it starts?

Marc W: *(Off mic – Inaudible)*

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

- David: Okay. William?
- William: No real thoughts. I do see the benefit of doing it early, but I have not put too much thought to it, so I don't have a very concrete opinion just yet.
- David: Shelagh, same?
- Shelagh: Yeah, I would say I have the same thoughts as William. Given whatever the timing, in terms of the corporate knowledge at this table, not in terms of age but in terms of corporate knowledge, mine is lower than many people because I have not been around the table quite as long. Maybe it is worth having a meeting one afternoon and creating a little time capsule. Everybody puts their thoughts into it, in case it is only in 2041. Then it gets opened up.
- Natalie: I was wondering. We don't have anyone here that negotiated the Agreement anymore to wonder their intent and thought. Obviously they chose 20 years for a reason. My gut says it was because it was a 100-year project, so every 20 years. Brain-picking some of those negotiators might be...
- Mark: I was involved in negotiations. Back then, too, I don't think the Project was estimated to go out until 2038. With the 20-year review, they thought the Project would be done before that, I think at the time. Having said that, I think it was like you said. It was more 20 years is an appropriate time to do it and plan out the future, but I don't know. That could change. Things change. I guess it depends on what people around the table think.
- Katherine: Could I interject?
- David: Yeah, go ahead.
- Katherine: As a possible piece of information to this, it is based on Measure 2 from the report of EA. Measure 2 is what set the 20-year timeframe.
- David: Do you have access to that so you could read it out to us?
- Katherine: I absolutely do. Every 20 years after the beginning of Project implementation, the developer will commission an independent review of the Project to evaluate its effectiveness to date and to decide if a better approach can be identified. This will consider the results of the ongoing research, be participatory in nature, and follow the requirements of procedural fairness and be transparent in nature. Then it goes on to say that if the review identifies a better approach that is feasible and cost effective, the developer will further study it and make the study and its results of the study public. That is where it was built into the Environmental Agreement as well.
- David: Okay, that is more food for thought, I guess. Shelagh?

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

Shelagh: I remember discussing this, I think, at the last Semi-Annual Meeting. I think a decision needs to be made or a definition needs to be found for what is Project implementation. I guess the Parties at this table should agree to when the Project was implemented. Was it the day the water license was issued, or was it the day after the reasons for decision for the Environmental Assessment were written or that the Environmental Agreement was signed? The Project was underway prior to the water license, the Type A water license was issued. Maybe the Review Board will have that. Maybe get back to the Review Board, and maybe they can mull over the ideas of what the....I mean, Alan Ehrlich is still there, and he was certainly the pen on the reasons for decision on the Review Board.

David: So we will await Alan's views on the matter. Then I guess we will schedule another meeting. There is no urgency on this, but maybe the next Semi-Annual Meeting or AGM we can come to some kind of consensus. Ken?

Ken: I am just going to put this out there. Wouldn't more of you like to be involved in this 20-year review? I mean...

Female: *(Off mic, inaudible)*

Ken: No, you don't want to be? I will leave it at that.

Erika: Mark and I are a part of that. I was there as well. To Katherine's point, yes, it was because it was already a measure. But I am just curious, is there any value? Do we rely on the Review Board's feedback, or is there any value in me digging through my notes to see how much we thought about this? At the time, it was like there is no solution in the works, but then, there was nobody looking at that anymore. It was just sort of based on the previous knowledge of there is nothing out there right now. I don't know. Is there value in doing some digging, or do we just rely on...because I found my old notes. There are binders of stuff.

David: I would encourage you, and we can ask one of the other negotiators what his recollection is. There are still a few around. Ultimately, it is the decision of this group. We will get advice. We will get insight, but we don't have to go with any one opinion. It is a collective decision I think.

I know the research summary is going to take a little time, and I do want Ben to be back here for the Report of Activities, so why don't we take a 15-minute break now and be back about 2:30. Thank you. Marc, if you are still listening, we will start on your update on the research program when we get back.

Marc L: Okay, sounds good.

David: Thanks.

Break

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

- David: We are going to resume. As I mentioned, we will start with Marc Lange, but before we do, Kerry Thistle is online. I don't know, Kerry, if you have had the opportunity to listen to any of the discussions and/or if you want to add anything at this point.
- Kerry: Thanks, David. No, I was actually in another meeting, so I am joining late. I did not have the opportunity to hear, so I don't have anything to add right now.
- David: Okay. Just a heads up, Shelagh made all kinds of commitments on your behalf.
- Kerry: I totally trust Shelagh, just like I totally trusted Todd.
- David: You don't learn easily, do you?
- Kerry: Clearly not.
- David: Mr. Lange, over to you.

Review of the Research Project

- Marc L: Okay, so the research project update is that there are not any updates on the research particularly, since the November meeting that we had last year. We don't have any new technical updates. For those who are not familiar with all the projects, I will just run through them very quickly and then tell you what we are thinking about going forward.

The research program, our main program, is in partnership with TERRE-NET, a series of universities across Canada that work together on a couple of projects. A couple of groups of projects are about stabilizing the arsenic trioxide, so encapsulating it if you will.

One of those is turning it into glass. As you might remember in November, basically exposing the glass to different kinds of water we might find up here is showing very good results. The water when exposed there over multiple days, the water comes out to have very low arsenic in it. We are very close to meeting the guidelines and water license requirements without much further treatment. It is a whole lot better than if it is just arsenic trioxide dust.

Another one that looks at encapsulating arsenic trioxide is making cement out of it. The project that is working on the cementation or paste backfill has been testing hundreds of different recipes to make sure the cement solidifies, because lo and behold, when you

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

add arsenic trioxide to it, it does not. They had to tweak the recipe, so we are finalized the recipe. After that, some test exposure to water will begin.

A couple of other projects: Instead of encapsulating it, we are looking at transforming the arsenic molecule. We are turning it back to a very stable arsenic sulfide compound. That is the sulfidation process that involves dissolving the arsenic in very hot water and then exposing it to strong acid, sulfuric acid. Then the arsenic would bind with the sulphur and become stable at that point.

We also had associated with that one a project that looked at creating sulphur locally, using local bacteria instead of importing all this sulphur, so biogenic sulfide production was another project that we are funding.

Those are the projects. There is nothing new on a science bench there since November, at least that we are aware of. The researchers continue to work on all those projects. What is a little bit newer for us is the projects we have been funding for 5+ years, the term of that agreement, the funding agreement, is coming to a close, so it is time to look at renewal. Researchers and ourselves have been in discussion. They submitted a budget to us to consider funding this work going forward.

Their asks at this point are similar to what they were in the past. That pretty much takes up all of our research budget at GMOB. What the Board has been thinking about over the last couple of days that will influence the path we take here for the remainder of the year and into the future is what else do we need to do to come up with the outline of a permanent solution that we could then recommend to the Project Team and then spend more time reviewing in the 20-year review?

What is coming out of these discussions for us is that glass is at a pretty advanced stage. Glass has been used for arsenic trioxide elsewhere in the world, and it has also been used in the nuclear industry to stabilize waste. It is not like it is a brand new idea. What we have done, I think, is just tested it with local materials and local water. We put a bit more legs under that idea, and it is showing some promise.

The other research project programs are advancing, but we are not at the stage where we can expose the transformed arsenic to water and do some thorough testing. We are thinking at this point we should consider looking at questions related to how we get this glassmaking a reality here onsite. We are looking at considering some sort of preliminary engineering, if you will, that looks at where a glass plant might be built, the energy requirements it might need, and the materials needed to make the glass. Remember, only about 10% by weight of arsenic trioxide is used to make glass, and 90% is other stuff, mainly sand and other things. How much materials would we need to make glass and transform 237,000 tonnes of arsenic trioxide?

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

We are considering investing in research and planning around a glass plant, a glass solution. By necessity, we are going to invest in other things. We might not be able to invest in all the other programs that we had previously invested in.

Another area that we are also considering that would go hand in hand with looking at preliminary engineering for a glass plant is the extraction question. One of the very important reasons why freezing it in place was chosen was because extraction was seen as a very complicated task that could expose workers. There are a lot of uncertainties as to how to safely remove the arsenic to bring it up top to process it.

We have explored extraction options in the past. We commissioned a report that looked at many options, but one was hydro-borehole mining. We also commissioned another study that looked at the farming industry, the bulk shipping industry that looked at how you move a powder around and how to do so safely. Those were all sort of preliminary extraction studies. I guess we are now considering doing something more akin to what we did with glass. What does an extraction option look like, specifically at Giant, specifically in the conditions that we have here so we can feed a glass plant?

Both of those kinds of studies would certainly tax us financially to be able to support all the other projects. We are at the debate stage going forward. What do we continue to fund? What new things to do we fund, and which projects do we invest a little less in? I might just pause there to see if there are any questions or anything else to add from my other Board members.

David: Are there any questions from anyone? Some folks have heard this 14 times already.

Diep: Hi, Marc. I am curious. You mentioned a couple of extraction methods that you guys were looking into. Have either them shown to be somewhat feasible, or do you need to do more research in terms of extraction?

Marc L: We have a few ideas that have come up. I think your question on feasibility is a key point there. Hydro-borehole mining has been used for extracting uranium, also a mineral you do not want to expose workers to. I think there are a few examples in the world where that has been done. This whole business of moving dust by vacuum or other ways is used in grains and other contaminated substances.

The key question is what does that mean in the context of Giant Mine where it is down into chambers? Basically, that is what we are considering doing is preliminary engineering or feasibility. The caveat on that is those kinds of engineering studies are very spendy, and we do not have those budgets. We will be looking basically for opportunities where we might either leverage dollars or do a lower-level higher uncertainty type analysis that we could afford.

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

The goal in both of those is to start putting wheels to what sounds like a reasonable solution to encapsulate arsenic, but now asking how do we feed this plant? How do we build this plant? What are the limitations that we don't yet know about, etcetera?

David: Are there any other questions or comments? Natalie?

Natalie: Thanks. I am going to ask a question, and it might be a stupid question, but it is something I can't wrap my head around yet. Marc, when you are talking about bringing the freeze forward, is the goal to try to get the glass down to zero leachate? What I am struggling with is that the freeze is going to be zero leachate once it is encapsulated, so why would we want to go to something that has a leachate that we have to monitor and take care of in perpetuity? I am wondering if that is the goal or if I am not quite understanding something, because right now, the freeze is aimed at having zero leachate. Thank you.

Marc L: Good question. I don't think we had set a goal to have zero leachate at the frontend. I guess we thought coming out of the site, somewhere or another, there would be arsenic flowing through the site. What this does, glassing, is removes the risk that is arsenic treated below ground for perpetuity. We did not have an aiming point for the leachability concentration I guess. I made the assumption that there would always be arsenic moving somewhere, and a treatment plant would be needed. Yeah, correct me on these assumptions that we have not published anywhere.

Candace: Right now, we have surface water storage, and that water is treated by our effluent treatment plant. That is why we have arsenic water at surface. The long-term plan is all the waters in the underground gets drawn up to the water treatment plant and then discharged to the bay.

Most of the Project is working toward getting rid of any surface water storage. Not only that, we actually have a bit of a struggle for getting water into the underground after we have covered the pits and filled all the drainage. Part of the Project is to get rid of surface drainage into the underground by redirecting flows around pits and tailings, and then covering them so any surface water is not coming into contact with the Project.

Long-term, we have really reduced the surface water interaction, and we don't have any easy way of redirecting the water to the underground to be pulled up into the new water treatment plant. That is the concern I see with moving this storage to surface is that is sort of opposite to our goals right now to get rid of that surface water storage and management.

David: Yeah, except that the freeze solution is a temporary solution. We have been through this discussion many times. Initially, the proposal was to freeze it and walk away from it. That is not going to happen. Long-term, it may be that the land is clean enough that the surface water flow can move into Back Bay without treatment, but that is going to

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

take some time, so you are going to need a treatment plant for some time. There is still underground contamination in the system that will require treatment for a while yet.

I guess the answer to the other question of what is our objective, ideally, if we can get the leachate below drinking water standards, then we are good, right? Given where we are with the current formulation and given what Dundee has told us about some of its advancements since that time, it is not unreasonable to think that we can get the leachate to drinking water standards and below.

Again, we are trying to juggle a bunch of things right now, and we are not totally sure about any of them. They are all sort of feasible, but they have challenges. If you don't buy a ticket, you are not going to win the lottery, so let's give it a shot.

Ken H: I think there are numerous different scenarios of how glass could be stored, whether it is on surface or whether it is below the surface, and also the size of the glass that is created. The more surface area there is, the more leaching possibility there is. I think with the tests they have been doing so far, they have actually been crushing the glass beads to look at the worst-case scenario. With storage as part of the engineering decisions and exercises and long-term behavior of material, then you ask if dry storage is better. Surface storage with drainage with just rainwater or whatever falling on it or not even, then your surface interaction is much less. There are just a bunch of things to consider in the whole equation.

Marc L: Adding to this whole water quality coming off from making contact with the glass, the tests done were not mimicking precipitation touching the glass, i.e. storing it on land. The tests were done as the worst-case scenario. The glass is floating, well not floating but is in the water below ground. What does the contact water look like after years? The tests and the graph that we talked about earlier about how much water comes out is a worst-case scenario. The glass is in the water, which opens up, as Ken was saying, storage below ground.

I absolutely think all these questions you are asking are great though. These are all questions that we need to bang around and test and look at our assumptions.

David: Shelagh?

Shelagh: Thanks, David. I am just wondering. The ultimate goal of anybody involved in the Project and GMOB's research is to get away from the in perpetuity requirement. You said your research is to find a permanent solution, but I guess a permanent solution could also be monitoring the site forever. I think GMOB's research wants to get away from that, so to Natalie's comments if it needs to be potentially treated forever, is that a better solution? I guess leachate is not necessarily a contaminant. It could be something that is not causing harm to the environment. I suppose it is finding who has the best option so that somebody someday can hopefully walk away from the site and not need to rely on likely public government funds to keep track of it.

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

David: Yeah, hence the need for a comprehensive Perpetual Care Plan. Where is that going to take us and when are we going to get there? Right now, it is one of the many things that the Perpetual Care Plan is going to have to address. Ken?

Ken H: Part of the equation is changing the form of the arsenic away from the arsenic trioxide. Vitrification does that. It puts it into a glass matrix with different bonding and stuff, so it changes it away from that arsenic trioxide molecule, which was the most bioavailable and toxic. If we just leave the arsenic trioxide in the frozen chambers, then it remains that toxic form, which has been the motivation for a big part of the cleanup here. We would rather pull it away from that molecular form and change it to something that is more inert.

David: Thanks, Ken. Are there any other comments?

Shelagh: I just want to clarify that my comment was not in support of keeping arsenic trioxide frozen. It was more of if you are looking at a solution, one of the big considerations is the byproducts of your new solution. My vote was not to keep it frozen.

Ken H: I fully agree. I think if we are spending some more money on looking at vitrification, there are still a lot of questions that need to be answered there. There are different types of work to look at testing and what else is in there. Are there other compounds that they are adding for fluidization or whatever in the glassmaking process that we have not looked for yet but create an issue with regulator stuff? If all we are looking at is arsenic coming out of the glass, then we might be missing something that is worse.

David: Okay, I am going to close it off at this point. We will move on to GMOB's Report of Activities. I will turn it over to Ben, January 11th to May 31st.

GMOB Report of Activities, January 11 to May 31, 2024

Ben: Thank you. All of you have a copy of the Report of Activities. This is something that we do every six months. This is the new time period in which we are covering. The GMOB budget is outlined there, and as of March 31st, the amount of money is held in three GIC accounts at this time.

A copy of the GMOB Work Plan is here in the report. It was submitted to CIRNAC on February 28th, as well as the mandated meeting. Appendix 2: List of the Meetings Attended by GMOB Directors.

As we go through the GMOB board member terms, this just shows when the beginning of the terms were and the end of terms. You will see that we have three directors who

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

are coming up this year for their end of term and possible reappointment or the reappointment of new directors. We will talk about that after this meeting.

The GMOB Activity Summary: These are the reviews, regulatory and document reviews, that GMOB has done, thanks for the most part to Mr. Paul Green.

Ongoing monitoring: We are taking a look at the Air Quality Monitoring Program, the inspection reports, the incident reports that are coming up, the surveillance network reports.

Monitoring the development of these action plans and those plans going forward: The release of the GMOB should say 2022 or 2023 Annual Report. Taking a look at the economics, the Perpetual Care Plan and the Giant Educational Module, we have not had a meeting of that for a year now.

Engagement and communications are those things that we have been attending, what GMOB board directors and staff have been attending during this period. This has to be adjusted, because this report was before three or four other meetings were held. We are at about 65 meetings in the past period of time. We engaged in three media sessions, but it is actually two, because the APTN bowed out at the last minute. The GMOB website and archives are ongoing.

So, you have had an update of the research program. What we do have to say is we have two unsolicited proposals that came to us. One of them is from Yakum Consultants. Right now, there are a number of steps we have to take in order to bring that particular research forward. One of them is intellectual property negotiations with Barrick Gold. That is happening next week. We are meeting with our legal, who is going to be in contact with them. Then a formal research agreement with Queen's University would have to be negotiated as well. That is in process, but we will see where that goes, especially on the IP negotiations.

The second one is through the University of British Columbia. We ended up getting a contact and had a research application from the Geological Survey of Denmark and Greenland. We signed a material transfer agreement with them. Their research is about taking arsenic trioxide and actually pulling arsenic out of it and turning it into an arsenic metal. The research program is very short on that, because they have been testing it at bench level. They also, I believe, have a pilot project going on in Denmark regarding that. We should be able to see the results of that in the fall of 2024. The samples are being extracted right now from our sample sent over to them.

Site visit: We have talked about that and the possibility of going to the Savannah River National Laboratory to take a look at their vitrification plant. What I did not put on here is Dundee actually has an operational plant in Quebec, and they have gone through the regulatory system in Quebec for that particular plant. We are going to have a discussion with them about the possibility of visiting that plant as well.

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

Appendix 1 is the GMOB Work Plan. That is laid out. The GMOB mandated meetings: We just took a look at this co-proponents annual meeting. Actually, Section 3.4d really does not talk about the co-proponents meeting as co-proponents with GMOB. It is actually a meeting that is supposed to be talking about the research program. Anyway, we will take a look at that and go from there. Then there is the list of the meetings that we have been attending and whether or not it has been online or in person.

So, we are busy - extremely, extremely, extremely busy. That is my GMOB Report of Activities to date.

David: For those unaware, Ben has indicated that he will be leaving the position in November, but I want to underscore that the Board has not accepted that as yet. I keep reminding Ben of that, but he keeps suggesting that we have no option. Well, I continue to disagree. Are there any questions about the Report of Activities?

Andrei: I have a question about page 2, the monitoring development of... What is this Socio-Economic Engagement Plan? Maybe that is a legacy item.

Ben: Yes. That is a legacy item, and I have not gotten an update on that from you guys, so that has been kept on there. Is there an action plan that has come out of that strategy?

Andrei: The first two items there: The action plan is basically the evergreen implementation plan that we share with our working group and advisory body. It is referenced in the updated strategy, but there is no engagement plan specific to socio-economics. That is part of the overall Project engagement plan. It is one of the categories there, but there is no one specific to socio-ec.

Ben: Okay, perfect. We will make the adjustment. Thank you. Geneva, that communications plan or engagement plan that comes into you?

Geneva: Yeah, and that is available with the Mackenzie Valley Land and Water Board. I can send you a copy. It is complete.

Ben: Great. Thanks.

David: Is there anything else? Let's go back to the agenda and see what we have left.

Reconciliation Issues & Actions

David: Reconciliation Issues and Actions: That is kind of a roundtable thing, but in terms of GMOB, we did not include a specific recommendation in the Annual Report regarding

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

reconciliation, the thinking being that everything that we all do is intended to incorporate the principles of reconciliation. Fundamentally I think, all we can encourage the Parties to do is do more and better, but there was not a specific recommendation that we thought would make sense in the context.

The bottom line is, we think things are going pretty well. We would rely on North Slave Métis and the Yellowknives to tell us otherwise. So far, we have not heard otherwise. Obviously there are challenges, communication challenges and so on, but my sense and the Board's sense is there is no lack of good faith in attempts to make things better. Are there any other comments from any of the Parties? Hands up if you have anything to say. Otherwise, we will skip the roundtable.

Natalie: Thanks, David. I agree with everything you just said, but we always try to come up with a few specific items that we have done since we last met to report on.

The past two quarters, the one item that I think fits is we have had some requests from our partners and rights holders to look at donating assets left on the Giant Mine site. We have been working with all our rights and stakeholders to see if there is anything of interest. So far to date, we have some take up, and we are still working with the Yellowknives to see if there is anything else of interest. That was one thing we have done. Instead of scrapping them or selling them, we are gifting them to our rights holders should they want them.

David: Great, thank you. Is there anything from anybody else?

Additional Items & Next Meeting

David: We are nearing the end of the meeting. The additional action item was the discussion amongst the Parties about the director appointments. I have had some brief discussions with folks. What I am proposing to do is we will close the meeting now. I don't think GMOB should be part of those discussions. Ben is available if you want him there, but the directors should not be part of that. We will await whatever outcome of that discussion is. I think that probably works best for everyone. I am seeing nodding heads.

The next meeting, next steps, we will leave in Ben's hands. Hopefully, well I know he will be around for the next meeting. There are some action items that we have identified and will pull out of the minutes of the meeting. We will get the transcript circulated to you guys as soon as we can. We will go from there. Is there anything else from anyone?

Shelagh: I have just a quick question. Not having been through directors before, but given these three terms expiring in August, what is the usual turnaround for appointments, and in my experience any other appointments? It would take a lot longer than a couple of

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

months, but maybe not Giant Mine. Is it not already in consideration with GNWT and other dominating parties with their nominees?

David: That is up to the Parties. Normally, there is no gap between appointments. What was intended at the outset is that the Parties would get together and talk about the expertise that they felt was necessary and whether the current appointment was still representing a sector that was needed, or upcoming priorities. Graeme, for example, we did not have an economist before. It turns out that we needed one, and that gap was filled by the City. That is the idea.

There has not been as much discussion among the Parties as had been initially hoped for. I think Natalie's suggestion is good that the Parties while they are here get together and have some discussions and make decisions sooner rather than later to avoid any gaps in the Board of Directors. I will leave it at that.

Kerry: Just quickly, something else we have done in the past is also ask from GMOB if there is anything from your perspective that has been lacking. Is there a specific area where we feel like we don't have the capacity or that we would like to see moving forward? Are there any thoughts from GMOB on where there might be a gap?

David: Let us think about that a little bit more. I am reluctant to speak to it right now. It is hard to say that there is an absolute gap right now. Where we lack expertise, our tendency has been to contract it, like with Paul and other contractors that we have hired, the greenhouse gas stuff and so on.

Personally, I would like to see more Indigenous folks on the Board. That is my personal opinion. It is a bunch of old white guys right now, or semi-old white guys.

Ken F: Sometimes grumpy old white guys.


David: I really want the Parties to think about that. You guys are as familiar as anybody about what the Board might need. I don't want to get into a situation where there is a conflict of interest, so I would really prefer that you guys have the conversation amongst yourselves and reach your conclusions. Shelagh?

Shelagh: Sorry. I am trying to understand the process. Of the nominating Parties, we have YKDFN, GNWT, CIRNAC, the City, Alternatives North... Let's say we huddle here for half an hour and come up with four different disciplines that we think GMOB could use, whether they are already on the Board or not. Would the GNWT then say I am going to advertise for this discipline, and Alternatives North agree to advertise for this discipline? I guess the first question is, is there a public call for expressions of interest as there are for most other board positions where there are nominations put forward by different parties? How would you say we are looking for this area of expertise?

**Giant Mine Remediation Project Environmental Agreement
Semi-Annual Meeting, May 31, 2024**

- David: It has not happened in the past, but Parties are free to do whatever they want to do. It is important to note that it is the Parties that make the nominations. There is no second guessing by any other Party. It is your call, but the idea is that you share a discussion about what you think is needed and who can fill what gap. The process by doing it is entirely up to you.
- Erika: It looks like there are three directors that have their dates coming up at the end of this year. Before having the conversation as a group, my thought from the last meeting was those directors would let us know if they are interested in continuing on. The conversation in the room might be moot if everybody wants to continue, unless then it is that awkward situation where you want to stay but we don't want you to say. P.S., that is not the case – we love you, Ken.
- Male: If you could find someone that David could get along with...
- David: That is assuming that David has to get along with anyone.
- Erika: Is that something that directors with their upcoming dates would be comfortable sharing around the table, or is that something that we should have a private conversation about?
- David: Look, I'm prepared to continue on if I am asked to continue on, but I am not lobbying for it. I understand that Alternatives North has its own decision to make, and I fully respect that. But I hate getting drawn into that discussion. I don't feel it is my role. Ken and Ken?
- Ken H: I feel the same way.
- Ken F: I am the same way. I am happy to keep going. It is up to NSMA. Gordon?
- Gordon: I think this is a discussion we should have without the Board members present.
- Female: Are we going to hear from Marc Lange? Oh...
- David: And Mark Palmer is way off. Do you want Ben there or not? Yes? Okay. Thank you all for the meeting. It is very productive. Gee, it's early. Thanks again.

Meeting Adjourned



Mark Palmer, Interim Chair
Giant Mine Oversight Board

2024 12 10
Date

Motions

1. Approval of the Agenda

Motion: Moved: E. Nyssonen moved to approve the agenda.

Seconded: M. Palmer

Motion carried.

2. Approval of the GMOB Semi-Annual Verbatim Minutes of May 31, 2024

Motion: Moved: M. Palmer moved approval of the GMOB Minutes, May 31, 2024.

Seconded: N. Plato

Motion carried.

Action Items

1. **Action Item** GMOB to send a formal letter to the MVEIRB asking about the 20-year review start date. Their response will be shared with the Parties. (page 6)
2. **Action Item** GMOB to share future data with the GMRP for the newly extracted samples re moisture content and integrity of the cement paste logging. (page 6)
3. **Action Item** YKDFN to update the Parties on the status of YKDFN and YKHEMP Program once funding terms are finalized. (page 6)
4. **Action Item** YKDFN and NSMA to recommend a possible facilitated reconciliation session for all members of the Parties to the Environmental Agreement. (page 6)
5. **Action Item** YKDFN to participate in GMRP's Revegetation Taskforce to incorporate Traditional Knowledge in the process. (page 17)