



**Mackenzie Valley**  
Environmental Impact  
Review Board

***Final Scoping Session Meeting Report***  
*for the*  
***Environmental Assessment***  
*of*  
***Tyhee NWT Corp's***  
***Yellowknife Gold Project***

November 26<sup>th</sup>, 2008

**Mackenzie Valley Review Board**

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# **EA0809-003: Tyhee NWT Corporation – Yellowknife Gold Project**

## **Final Meeting Report from the Yellowknife Issues Scoping Sessions**

Compiled by: Mackenzie Valley Environmental Impact Review Board (“Review Board”) staff  
Location: Yellowknife Inn Copper Room, Yellowknife, NT  
Date: October 16<sup>th</sup>/17<sup>th</sup>, 2008

### **INTRODUCTION**

Review Board staff hosted scoping sessions in Yellowknife on October 16<sup>th</sup>/17<sup>th</sup>, 2008 to gather issues and concerns from all parties about the proposed Yellowknife Gold Project, approximately 90 kilometres northeast of Yellowknife. The Review Board is using this meeting report and all of the information on the Public Record (available at [www.mveirb.nt.ca](http://www.mveirb.nt.ca)) to determine how to proceed with this Environmental Assessment.

While this meeting report is as comprehensive as Review Board staff could make it, this is not a verbatim document. It is based on notes by Review Board staff. Unlike the official statements made at Review Board hearings toward the end of the Environmental Assessment process, scoping sessions are less formal dialogues.

People’s names (other than in association with Developer’s responses) may not be associated with individual statements. A digital recording of the session is stored in the Public Record.

Contact Paul Mercredi at the Review Board with any questions or comments:

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## ATTENDEES

*In attendance October 17<sup>th</sup>, 2008 (only those people who signed in or made their names known):*

Jessica Simpson	MVEIRB
Lionel Marcinkoski	INAC
Grant Greenine (?)	
Anne Wilson	Environment Canada
Dane Fox	Environment Canada
Al MacDonald	MVEIRB
Nicole Spencer	MVEIRB
A.I.O.	?
Lorraine Seale	INAC
	NWT/Nunavut
Ryan Silke	Chamber of Mines
Jennifer Drygeese	YKDFN
Mark Casas	INAC-WRD
Chandra Venaldes	ENRWildlife
Joel Holder	ENR
	INAC-
Zuniqua Nilakantha	Communications
	INAC-
Tricia Melander-Farole	Communications
Erika Nyssonen	ENR-GNWT
Sarah Toree	ENR-GNWT
Todd Slack	YKDFN
Rachel Crapeau	YKDFN
Paul Mercredi	MVEIRB
Tawanis Testart	MVEIRB

## **SUMMARY OF ISSUES RAISED**

### **Missing or inadequate information was identified in regards to the following:**

- More appropriate air quality modeling to predict and mitigate impacts
- Further alternatives assessments suggested for tailings containment facilities
- A more thorough prediction and description of effluent quality and monitoring framework
- Further analysis and explanation of hydrology of area
- Further information required for fish habitat impact assessment and compensation plan surrounding the removal of Winter Lake from the local watershed
- More in-depth analysis of wildlife presence in area (i.e. denning habitat, owl species)
- Further discussion and analysis of mine impacts on caribou
- A more clearly defined Environmental Management System for the project and operation
- Further information regarding the capacity of Tyhee to hire Northerners

### **Public concerns about the following important issues were identified:**

- The redefinition of Winter Lake to a tailings facility via Schedule Two of the Metal Mining Effluent Regulations in the Fisheries Act
- The lack of a closure and reclamation plan in the Project Description Report
- The need for increased depth of study and planning from the developer for the next phase of assessment
- The Yellowknives Dene First Nation want further consultation on an number of matters associated with development, including archaeological assessments, the effects of the project on caribou, as well as more in-depth participation with the Yellowknife Gold Project in the future

## Definitions

ARD – Acid Rock Drainage  
BQ Herd – Beverly and Qamanirjuaq Caribou Herd  
CARD – Contaminations and Remediation Directorate, Indian and Northern Affairs Canada  
CEAA – Canadian Environmental Assessment Agency  
CEPA – Canadian Environmental Protection Act  
COSEWIC – Committee on the Status of Endangered Wildlife in Canada  
DAR – Developer’s Assessment Report  
DFO – Department of Fisheries and Oceans Canada  
EA – Environmental Assessment  
EBA – EBA Engineering Consultants Ltd.  
EC – Environment Canada  
EIA – Environmental Impact Assessment  
ENR – Department of Environment and Natural Resources, GNWT  
GNWT – Government of the Northwest Territories  
INAC – Indian and Northern Affairs Canada  
MMER – Metal Mining Effluent Regulations (under the *Fisheries Act*)  
MVRMA – Mackenzie Valley Resource Management Act  
NSMA – North Slave Métis Alliance  
NWT – Northwest Territories  
PDR – Project Description Report  
PoW – Prince of Wales Museum  
SARA – *Species at Risk Act*  
TCA – Tailings Containment Area  
TIA – Tailings Impoundment Area  
ToR – Terms of Reference  
VEC – Valued Ecosystem Component  
YGP – Yellowknife Gold Project  
YK - Yellowknife  
YKDFN – Yellowknives Dene First Nation

## MEETING REPORT

The meeting commenced at 9:10 am. Review Board staff member Alistair MacDonald gave brief introductory comments. Jessica Simpson, Community Liaison Officer for the Review Board, as well as Paul Mercredi, the Review Board Environmental Assessment lead for the Yellowknife Gold Project give a brief presentation on the assessment process.

Tyhee NWT Corp Vice President Hugh Wilson also gave a brief presentation on the key aspects of the Yellowknife Gold Project. *Note: This presentation and other presentations are available on the review board website at <http://www.mveirb.nt.ca>.*

*Note:*

*Non-indented comments are from parties/public.*

*Indented comments/responses are from Developer.*

**9:30 am**

### **Tyhee Presentation:**

- Not an addition to Discovery; site adjacent to historic Discovery Mine
- Due to current economic situation, construction and development schedule may change
- Tyhee is a gold exploration development company
- NWT Corp is a subsidiary of Tyhee corporation
- Property History:
  - Original mine circa. 1949
  - Discovery was the richest gold mine in Canada at the time
  - INAC/CARD have cleaned up the site
  - Tyhee purchased Discovery mine property Nicholas Lake mine property in 2001
  - Continued exploration in 2005
  - Submitted application to Mackenzie Water Board in 2005, referred to EA and went to scoping; ToR produced
  - Cancelled 2005 EA, renewed application in summer of 2008
  - Will move forward with an open pit, underground operation
- Key 2008 project components:
  - 80km north of Yellowknife
  - 160-190 person workforce; 2-week in/2-week out rotation schedule planned
  - Winter Lake projected tailings containment area
  - Continued use of the airstrip has no impact on the tailings cap
  - Winter road access from Prosperous Lake to Discovery
  - Nicholas lake resource access proposed as a winter road that can become an all weather road – depending on the economics
  - Round Lake was also looked at and has been impacted by Discovery – Round Lake drains into Winter lake
  - Open pit will consume some hill at the site, beside Winter Lake

- General site plan of Ormsby:
  - Open pit will encroach onto Winter Lake and therefore the north end of winter lake - will have to be drained (since for safety reasons you cannot have a standing water body to be near an open pit)
  - Simplified process flow: similar to what was planned in 2005
  
- The credit crisis has affected the resource system and junior projects even more
  - The credit crisis has made things a little more tenuous and so the schedule for this project may change
  - Clear and concise Terms of Reference will allow Tyhee to make best use of resources
  
- Comparison of Scope items from submissions in 2005-2008:
  - 5 to 13 year lifespan possible
  - 1500 to 2500 tonnes per day processing capacity
  - Discharge (volume) to the environment may increase
  - 2005 included biophysical information collected up until that time. We have followed though with other work that has been incorporated into this new submission
  
- Valued Ecosystem Components (VEC):
  - Air quality
  - Water
  - Fish
  - Terrestrial vegetation
  - Mammals
  - Birds
  
- Valued Ecosystem Components are impacted by:
  - waste rock
  - site preparation and construction
  - construction materials
  - plant site
  - acid rock drainage
  - mining and processing
  - power supply
  - sewage
  - tailings
  - water management
  - noise, etc.

## **Discussion**

### **Air Quality**

#### **Tyhee Presentation:**

- Tyhee used three sites for air quality and noise monitoring: one northeast of the airstrip, another in the vicinity of Round Lake, and another near the plant site area
- Tyhee plans to follow NWT air quality guidelines, as well as Environmental Protection Act emission guidelines, and also incorporate baseline data into Environmental Management Plans

Dave Fox – Environment Canada - Air Quality – More info on baseline data. How long was baseline collected, and were they passive monitors?

Developer - 48 hours? Over a period of days. Project Description and appendices contains details. We do not want to resubmit what we have produced.

Dave Fox – Was the information that you submitted the extent of your monitoring?

Developer - What is in there is the extent.

Dave Fox – We are concerned that you do not have enough data for baseline. Thirty days in summer is insufficient. Maybe use longer term data sets for baseline, maybe from Yellowknife site.

Developer - Technical appendix possibly contains a summary of Yellowknife data for particulates and other parameters. We did use long term data.

Dave Fox – Wanted clarification from using on-site data

Developer - We believe the data provided is sufficient as a baseline.

Dave Fox – Yellowknife data is being used for baseline? Waste rock pile will be a significant source of fugitive dust. Will that be considered in assessment?

Developer - Any activity that creates dust will see dust suppressant activity.

Dave Fox – Was not identified in report

Developer - Was not at this stage, but may be in DAR.

*Alistair M – This is why the questions that the parties are posing are important. The questions asked here may have answers from the developer, but they may not. Written submissions from parties that encapsulate the major concerns identified through questioning here will contribute to the scope for the Terms of Reference. We may not have all the answers today.*

Developer - Regarding air monitoring data baseline: our appendix includes information from the YK air monitoring station (since 1992), from Fort Liard gas development, Norman Wells, Daring Lake and Fort Simpson for the varying parameters. We monitored at the site to a scale we believed to be appropriate to the development.

Dave Fox – Has Tyhee decided on how assessment will be conducted? Air dispersion modelling or what model will be used?



Developer - Cannot answer that right now. We will listen to your ideas. We will probably monitor to identify changes from baseline, also keeping in mind the current economic situation.

Dave Fox – We are interested to see what impacts will occur. Most assessments use models to predict impacts. We would expect to see air quality monitoring.

Developer - Monitoring during operations?

Dave Fox – No, initially you model to identify issues, and prepare for mitigation if modelling points to potential issues. If not, then we expect monitoring for verification and we expect input for that monitoring.

*Alistair M – We encourage sidebar discussions and records kept and produced to MVEIRB.*

Dave Fox – We would be very open to meet with Tyhee to discuss these issues

Developer - That would be acceptable

Dave Fox – One other point regarding incineration: Environment Canada will have a document that outlines how incineration should be done on Federal Lands, available at the end of the year. We can provide that information when available if timing is acceptable. We would like to see more information from developer with regards to the equipment that will be used for incineration and incineration plan as part of your waste management plan.

Todd Slack – YKDFN – We would like to see modelling or prediction, especially the associated values, along the lines of noise and caribou avoidance during mine operations in future documents.

*Alistair M – the EA will focus on the affects on the environment, and the information required today does not depend on whether or not the developer has the funds to provide that information. In light of this, the Review Board would like parties to focus their questions on affects on the environment.*

**10:20 am Break**

## 10:45am Reconvene

### Water Quality:

#### **Tyhee Presentation:**

- Project is in the Yellowknife River drainage basin
- Sedimentation is potential impact during construction; silt barriers may be used
- Sewage Treatment Plant will treat sewage
- Effluent will meet Metal Mining Effluent Regulations under the Fisheries Act

Mark Cassas - INAC Water Resources – Regarding impacts of Waste Rock Storage Area and Tailings Containment Area, what are the impacts and where have you identified them?

Acid Rock Drainage (ARD) – ARD is encompassed into Waste Rock Storage component. We have ongoing studies in that field. As part of the existing advanced exploration water license, we submitted an ARD Management Plan, which included a longer term plan to incorporate the data from such studies. This may appear in the DAR. That information is in the Water Board files. ARD Program was identified in submission also. ARD Program identified in the submission to Water Board. Ongoing studies continue.

Mark C. – Should be listed as a potential impact on the impact-mitigation table in the developer's presentation. You indicated Tailings Containment Area (TCA) will meet Metal Mining Effluent Regulations (MMER)? Does Board not set those parameters?

Developer - Our understanding is that MMER are applicable to Gold Mining operations – discharge criteria have generally followed MMER, the Board can make criteria more stringent at their discretion, and can include other parameters.

*Alistair M – Review Board can produce more stringent requirements if parameter will produce significant adverse impact.*

Anne Wilson – Environment Canada – MMER are minimum national criteria – NWT does make more stringent limits. Do expect lower criteria. Doris North had two compliance points with possibly less stringent limits.

Developer - We recognize that, but we have to start somewhere. Limits are at permitting phase, versus EA phase. Once DAR is submitted, hearings are held where parties can suggest limits. Regarding Doris North example, we have been looking at Narrow Lake for a secondary compliance point.

*Alistair M – Good analysis required of receiving environment is required. If that analysis indicates it is more sensitive, the minimum requirements may need to be strengthened, that is where the more stringent requirements may come from.*

Todd Slack (YKDFN) – Language in PDR not clear regarding TCA. For example, PDR suggested that Winter Lake would hold 13.5 million tonnes. Earlier documents indicated 15 million tonnes; point of concern because Round Lake could serve as a secondary containment area. I need to assume it will be used as a secondary TCA. Please clarify these ambiguities in the next phase of documents.

Developer - Waste rock quantity is 15 million tonnes. We are confident that the TCA will contain all tailings in operation

Todd Slack (YKDFN) - Possible I misinterpreted it. With respect to selection of TCA: the three alternatives indicated in report are not appropriate, not proper alternatives due to capacity. It seems the report was written in such a way that Winter Lake is the only alternative. Are there other alternatives? With all other projects that have re-classified lakes via the Fisheries Act Schedule 2 option, all other projects have used a multiple accounts analysis, where they produce several different options for siting the tailings area before they choose a site. We would like to see this type of analysis before the actual choice is made

Developer - Good point. The dialogue we have had with Environment Canada and Fisheries and Oceans Canada indicated we have to do more work in the area of alternative assessments. Todd brings up good points. We intend to do a more comprehensive alternative assessment, possibly in the DAR. The more comprehensive analysis would include a table of what we looked at (if this would amount to a multiple accounts analysis), what the advantages were, it would be a lot broader than that provided in the PDR, and based on the discussions we have had to date with the mentioned departments a few months ago. We expect that you will specify what you are looking for in the Terms of Reference.

*Alistair M – Acid Rock Drainage – Review Board will pull various data into EA if it has to, but if documents exist that parties feel are important for consideration, please include them in written submissions. When developers and parties are meeting, we highly encourage meeting minutes are taken, and outcomes of agreement or disagreement are kept, so that the board can see what kind of dialogue has taken place.*

Developer - The ARD management plan is incorporated into this submission, and data from ongoing studies will included in the DAR.

Sheena M. (DFO) – Good point on the meeting minutes. We did meet with Tyhee regarding alternatives assessments. We provided examples of Meadowbank and Doris North alternatives assessments as a guideline of what we would expect, including the detail we expect to see. If anyone wanted to see those, we could provide those documents, but that is an example of the guidance we gave.

Todd Slack – One of those examples should be on the public registry. Third item is in relation to the dams being built, we would like to see special attention with regards to the monitoring regulation put in place for the dams forming the Tailings Containment Area. There have been breaches at the Old Discovery, Colomac, as well as large scale breaches in Hungary and Spain. This is one of our biggest concerns. We would like to see a management plan that indicates what triggers and thresholds that require action long before the risk for breach becomes serious. We would like to see that as part of the next phase of EA.

Developer - Typically, under the water license/land use permits process structures, there is an annual geotechnical inspection that is required. We will incorporate annual inspections into management plants.

Todd Slack – Regarding TCA operations, and associated timeline of release: will the release be a slow, constant release, or will there be ‘pulses’ of release during summer? We would like additional information regarding that. Also, we would like information on the anticipated toxicity of the water in the TCA. What will be the effects on wildlife, and how will they interact with the TCA? We are requesting plain language explanations regarding the cyanide leaching processes that you will be using, for the comfort of our community members. Regarding the thermal

regime: if TCA does not freeze at the same time as surrounding lakes, what are the anticipated effects on wildlife (vis-à-vis attracting wildlife to a potentially toxic lake that is unfrozen)? We would also like a discussion of the effects of ammonia levels that may be found in the outflows and the site itself, since the diamond mines have had a good deal of trouble with that.

Developer - Good questions, good review. Regarding discharge Water Quality – we have stated that MMRs are the ones we will strive to meet. We recognize that the Water Board requirements could be more stringent. PDR indicated annual release, if release is required, probably during summer. Cyanide will have to be explained in more plain language. Thermal regime – we will have to monitor for changes. Ammonia - we are aware that it needs to be monitored. Hopefully that answers your questions.

Todd Slack - It does not answer, but recognition is important. Regarding groundwater - interconnection of groundwater between old and new mine workings. Related issues: groundwater transport of metals; identification of faulting and water transport from Winter Lake; analysis of local and regional groundwater conductivity and connectivity. We would like to see a discussion of the possibilities of whether or not TCA water can proceed through faults and contaminate other areas and water bodies.

Developer - Historic mine is some distance away (~ 3 kilometres away). Interaction we consider to be minimal. We are initiating a groundwater study that should address some of your concerns in the DAR.

*Alistair M – The developer will be undertaking additional studies. We want to ensure that the studies that are done address these issues, therefore the more detail that public can provide in scoping submissions, the easier it is for the developer to address concerns by directing studies towards that end.*

Mark C – It is projected that Winter Lake has a capacity of 13.4 million tonnes, whereas the tailings produced will be 13 million tonnes. Other mines in area have had issues with winter lensing that can take up volume in TCA. Can you address this? It appears that the PDR has not.

Developer - Good question – the short answer is the capacity should be as stated. To be fair, we have not determined if lensing will be a problem. We recognize that has been a problem elsewhere. Something we will continue to look at as we design and move forward.

Mark C. - The PDR suggested that the site has discontinuous permafrost. Is the Waste Rock storage area on permafrost? If it is, how will the storage area will built it be built to maintain permafrost so that possible melting does not affect underlying and surrounding Water Quality?

Developer - Yes permafrost is discontinuous. Not sure what conditions are exactly in the projected area, but area does not look like permafrost since it looks ‘muskeggy’. If it is a concern raised by you we will have to look into it with more detail

Mark C. - That is one of our concerns, so we would like to see more detail. The PDR has information gaps, and we recognize that the PDR is not a final document. For example, there appeared to be no hydrology plan which would give parties an idea of where water is going. This will help parties focus their concerns, in addition to giving us an idea as to where we can put monitoring sites.

Developer - Are your concerns more with surface drainage or groundwater?

Mark C. - More with groundwater and where it is going (i.e. under Winter Lake), which is probably not clay lined, therefore water can probably seep underneath. If somebody can take a look at it, that would help us with our efforts.

Developer - As stated earlier with respect to groundwater, we have a pending study and will respond to those types of questions in the DAR.

Mark C. - There is no Closure and Reclamation Plan in the PDR, and that leads to concerns, for example how the pit will be handled after mine life, and related issues. Where will that come in the process – in the DAR or earlier?

Developer - There was no closure plan in the PDR, but the management plans that will be in the DAR should address the closure plan and other components associated with the project.

*Alistair M – with most mine assessments, INAC usually submits the most recent version of their mine site reclamation guidelines for the NWT, for posting on the public record in order for other parties to be aware of the expectations for the various stages of closure and reclamation.*

Mark C. – We will submit plans to Paul M.

The settling ponds at the Nicholas Lake development are not identified for location, volume, discharge and inputs. Have you not worked out these details yet?

Developer - The proposed site plan for Nicholas Lake is really rough. No, we have not exactly identified the exact locations; we gave rough areas in the presentation. We recognize the detail should be there for the DAR, as to where the ponds are located, where the water will go, how it will be handled, etc.

Mark C. - PDR did not seem to specify how cyanide will be handled. Will cyanide be kept separate from certain parts of the TCA, or combined with tailings? We would like to see more information regarding the main issues of using cyanide, and possibly a list of pros and cons associated with that process.

Developer - Mill will have cyanide destruct circuit; destruct means that it will take the cyanide out of the tailings. That cyanide in the flotation concentrate component of the mill process is approximately ten percent of the total mill feed. What goes into the mill is one hundred percent. Ninety percent of the tailings are determined from the gravity circuit, ten percent is the flotation concentrate, which has the remaining gold in it, which is 'cyanided', the cyanide destruct circuit then takes the cyanide out, and the ten percent is combined with the other ninety percent, which then goes to the Tailings Containment Area. Yes, there may be an advantage to segregate those two, but at this point it is a combined tailings released to the TCA. Obviously there will be more information required in the next phase from us, given the questions that we have received thus far.

Mark C. - Further to other information gaps, annual discharges not well discussed. Hard to provide enough information (feedback for scoping session), when these things are missing. Assuming they will be in DAR.

*Alistair M – once the DAR comes out, the developer will be asked to fill information gaps. There will be many other opportunities for input. We may hold a technical session once the DAR is released.*

Sheena M. (DFO) – do models of water quality predictions include loss of flows from the Winter Lake part of the system?

Developer - The water balance as we submitted incorporates the drainage that would have come into Winter Lake from Round Lake, but drainage is quite small in the big picture, but is included in the overall water balance; a water balance has been submitted in this document, with a recognition that the information needs to be refined at the next

level to address these questions, and to give us time to look at the engineering required for the plant, with associated water demands, that will allow us to finalize that water balance.

Sheena M. - We would like a summary of potential impacts on water quality with respect to TCA. Winter Lake being a TCA will affect flows downstream, including potentially water quality as well.

Emma Pike - CARD/INAC – there is a potential impact associated with water consumption from Giauque Lake since you will be drawing water from there. The concern for us is that there is an in-lake tailings area associated with the Old Discovery Mine facilities, and there is a tailings cap covering the in-lake tailings, with water cover acting as a partial-cap. If water drawdown occurs we will be concerned that this could affect remediation efforts.

Developer - You are concerned drawdown will expose tailings and cause resuspension? We do not expect our use (volumes) will affect that. We may have to expand on that to allay concerns

Anne W – Regarding effluent quality, we wanted to explore a little further than what the 2005 ToR indicated. We expect a full characterization of potential effluent quality – not just regulated parameters, but including salinity, all metals that geochemical studies conducted thus far have indicated are present. Good examples are from Meadowbank, Doris North evaluations. These evaluations made it possible to do a good EA, by looking at potential effluent quality, source constituents and how those could be managed, expected mixing zones and downstream extents and values of concentrations. They had good models so we could have a parameter by parameter basis for analysis, which helped to identify problems and mitigative solutions. This will inform this process as to treatment contingencies and best numbers achievable. Also, there is the ammonia issue; cyanide degradation will produce ammonia, nitrate and nitrite as by-products. Models should incorporate these characteristics for effluent quality.

Developer - We will have to address these in the next phase, if they are part of the ToR. Can't respond at this point.

Anne W. - Will the Environmental Management Plans at the back of PDR be in the DAR?

Developer - The whole system will be in a lot more detail in the DAR.

Anne W. - We will be looking for details on items that will affect water quality, and deal with contaminant sources such as the solid waste and hazardous waste management plan, and Waste Rock and ARD issues, things listed in the back of the PDR and presentation. It is fairly important to have a good level of detail on those. Regarding water effects monitoring: you have mentioned that there will be environmental effects monitoring requirements in accordance with MMER regulations; you are familiar with surveillance network programs, and aquatic effects monitoring program associated with licenses. It would be efficient and helpful in this EA if you have a framework to indicate how you will do monitoring to meet requirements and eliminate redundancies. Our concern is will you be able to detect any changes that will occur, or even predict effects correctly? We want monitoring to be effective, as well as know that the types of tests and limits you are using, and that statistical models and results are robust. Is baseline data adequate? We would like that information so that we will be confident that effects will be picked up if they occur.

**11:35 am Lunch Break**

## **1:10pm Reconvene**

### **Fish and Fish Habitat:**

#### **Tyhee Presentation:**

- Fisheries work conducted in 2004 and 2005
- 2005 work a result of discussions with DFO at the time, based on findings in Winter Lake
- Runoff will be collected and pumped into Tailings Containment area or into process circuit
- Six pike found in Winter Lake in 2005
- Water quality in Giauque Lake will not be affected
- Water crossing will be designed to DFO standards

Todd Slack – YKDFN – One of our issues surrounds the terminology/clarity of language in PDR. (Roman numerals) page six indicates no fish in Winter Lake, then page seven indicates that ten fish were collected in Winter Lake, as an example of the uncertainty in language that seems to waiver from one position to another. We would like to see clearer language that would maintain a more unambiguous position. Also, we are concerned at the elevated chemical loadings in the area, for example Giauque Lake has a health advisory for fish consumption. We would like an indication of how widespread the elevated levels are, both pre- and post-industrial activity. We are concerned also with what exactly are the natural background chemical levels in the area, which will allow us to detect particular levels further downstream. This will also help us to identify the levels of bioaccumulation in the fish, which has ramifications on how the fish tastes, etc., these are major points that are important to members of the YKDFN.

Developer - Appreciate the identification of differences. We will look at that for the DAR, and ensure that there is clarity of language for the next phase. I do not think it is material to the process at this point to change that. With respect to the elevated metals in Giauque Lake and the bioaccumulation in that area, it drains in a different fashion than our project. We see your point; maybe we can have further discussions on that point as follow up. Obviously there are a number of ways to look at bioaccumulation. We do not see the same situation at the 2008 YGP, since we will not be using mercury in our processes, whereas old Discovery Mine process used mercury.

Sheena M. (DFO)- I wanted to refer to a letter from December 16, 2005 from DFO/EC detailing more information needed for impact assessment, regarding fish habitat and compensation plan. DFO would like that for the registry. It details what information we would require regarding those plans, such as a quantification and type of impacted habitat. Since in the system it looks like there might be pike rearing and spawning, we would like to know the significance of the Winter Lake habitat to the overall system; it is possible that it is a spawning/rearing area for fish from Narrow Lake. We would like to point out that the number of fish caught in Winter Lake, 10 pike is the same as fish caught from Narrow Lake; we do not believe those numbers to be insignificant, nor is the use of that habitat insignificant. We would also like to see a discussion of the loss of the outlet stream into Narrow Lake, the amount of habitat there, and the potential impacts to loss of Winter Lake and the outlet stream to the overall system.

*Alistair M – If DFO feels that the previous letter is still relevant and does not need updating or editing, that document should be sent in as part of the scoping submission from DFO, and that goes for any other department.*

Sheena M. (DFO) - We can reiterate many of our points in our submission, though we have discussed many of our points with Tyhee already.

*Alistair M - In any past requests, has Tyhee incorporated any requests into ongoing studies and plans?*

Developer - We have had discussions with DFO, and she has provided us with that information, and did refer us to that 2005 letter. We are following up on it, but not in a material way yet. When we do, we will file it.

Sheena M. (DFO) - We wanted to make it clear, regarding potential impacts; we would like to see discussion regarding inputs of productivity, and the importance of that extra habitat to the Narrow Lake system. Typically, those inflow areas are part of the most productive areas of a lake. We need to see a discussion of the impacts of removing Winter Lake and those flows from the area.

I think that will be incorporated into the overall water balance, and the impact assessment on the receiving waters; I think we can cover that. We have expressed concern that there is turnover in the department, and we were always talking to somebody new, and now Sheen is leaving even though she assured us she will be around for a while. We want any departmental comments (or those from an Aboriginal community) to reflect a position with which the Review Board can create a Terms of Reference. Tyhee would like assurances that there will be no changes to the ToR between now and when we start to work on the DAR. We want some certainty for what we will be preparing for in the DAR.

*Alistair M – Point taken, Hugh. While we cannot control the turnover rates, we can direct how the Terms of Reference is developed, and how we define the scope of development and the scope of assessment. If new information becomes available, or if the project design changes, the Review Board has the right to change the scope of the assessment. That is a Review Board decision. The official departmental submissions tend to be more closely related to departmental policy since it passes through several hands before being published, rather than being simply the product of one-on-one discussions.*

Sheena M. – That is part of the reason that I am stressing that the DFO position has not changed since the 2005 letter. We have been asking for that same level of information to move forward with the assessment. We still need to know the amount of amount of habitat impacted, and the outlet stream is considered impacted fish habitat. That was not specifically noted in previous correspondence, but my comments are very much in line with stated departmental positions in the past.

## **Wildlife issues**

### **Tyhee Presentation:**

- Moose, Caribou, Esker, Breeding Bird and Waterfowl baseline surveys
- Habitat that will be disturbed by construction is not unique to area
- Tailings Containment Area may be a hazard to migrating wildlife and waterfowl
- Solid waste may also be an attractant and hazard



- Kitchen waste to be incinerated
- Use of Winter Road will be monitored

Anne W. – Environment Canada is responsible for Species at Risk Act (SARA). We did not see any reference to this act in this PDR, though there was in the 2005 report. Have you given that any thought to exactly what species are at risk here?

Developer - In the PDR and appendices, there are sections on SAR and what species occur, species that were or could be found in area. We also conducted a rare plant survey in the property that has been discussed in PDR and appendices sections. It is in there.

Anne W. - Appreciate you have identified species with status that would be affected. In this assessment, how will you evaluate sensitivities to these species during mine operations and its affect on their habitat? This can come later, please refer to Section 79 of SARA. Also, how will migratory birds be affected? How will disturbance to active nests and eggs be avoided during project construction? Have a section on that in the final DAR.

Developer - I assume it will be in the DAR

Chandra V. – ENR Wildlife Division – PDR seems to outline the types of impacts that you will discuss, we will submit our comments at the end of the month. On p. 243, it states that none of the 47 bird species found have been evaluated by COSEWIC 2002. Two birds have now been included on that list as species of special concern: the Olive-sided Flycatcher and the Rusty Blackbird. You should update that list, since you have responsibilities to those species under Section 79 of SARA. It appears that the owl survey was done in one night in April 2005 and no owls were found. The short-eared owl, which is a species of special concern, migrates into the area between April and May. You might want to try again to see if you can either catch or hear owls, if you are doing a presence-absence survey. Also, eskers are important den sites for wildlife; it appears that you only found one abandoned fox den in previous esker survey. You should address this further before you begin using the esker as a source of road aggregate. Regarding PDR Section 5.6 in the description of impacts, we would also like to see a better description of the effects of habitat loss due to mining activities, from construction to production. You indicate that the habitat is not unique, and while that may be true, there could also be caribou avoidance based on mine-produced noise. We would like to see data on that. Since the Bathurst herd uses the area of the project as well as the areas of the three diamond mines, we would like to see data on cumulative impacts. We would also like to see what your plans are to protect wildlife on the Nicholas Lake road and the airstrip. Exclusion of wildlife from the Tailings Pond is also a concern. These are mostly suggestions on what we would like to see more work on

Developer - Points are taken, and obviously you will be considering them in the Terms of Reference. I think that's where we're going to have to leave it at this point.

Chandra V. – Regarding the Esker survey: One fox den found. There should be further discussion regarding the effect of habitat loss. What kind of data can you provide for caribou avoidance? Safety of Wildlife on Nicholas Lake Road and airstrip.

Todd Slack – My overall impression of the wildlife section was short on the next steps – it was very one dimensional. There should be an analysis and discussion of exactly what the observations and data mean, to foster a better understanding of the current wildlife situation for us. Also, we would like an identification of the preferred and secondary aggregate sources as the planning process moves ahead, so that these can be better evaluated for their importance as wildlife habitat. We note the initial work done for the PDR, but we would like to see additional research to assure us that these areas will not be critical denning habitat, or are not actively used. This is a very important spring hunting area for the YKDFN. The 2005 caribou survey covered

approximately 500 square kilometres, and saw approximately one thousand caribou; your survey covered only about one percent of the entire herd. We also disagree with the language from the PDR that indicates the fluctuations within the Bathurst caribou herd are entirely natural to the extent that this fluctuation can account for the recent large reduction in numbers.

Developer - We have recently completed an aggregate source investigation will be incorporated in the DAR, including a habitat assessment that was undertaken prior to that. Regarding the caribou numbers, that is an issue that is difficult to grasp, considering the recent controversy in that area. No further comment on numbers at this point.

Todd Slack – Given that this is an important spring hunting area, one of our big concerns for the Terms of Reference is that the catch/hunt per-unit-effort will increase with increased access to and disturbance at the minesite. This will affect those YKDFN members who wish to continue using these traditional hunting grounds. This will be an area of concern for the YKDFN as the process moves forward.

Erika Nyssonen - ENR – You have noted solid and hazardous wastes as potential impacts. ENR would like to see a complete Waste Management plan as a component of the DAR. This can impact both wildlife as well as air quality, and with that, we would like to see what your plans will be for incineration on site as a component of your Waste Management Plan for the DAR.

Developer - Environmental Management System with the various management plans will address the concerns you raised.

*Alistair M – I do not know if the 2005 Terms of Reference indicated to the developer that a description of how traditional knowledge should be incorporated into development planning, but the recent Tli Cho amendments to the MVRMA (circa 2005) have put a heightened onus on the Review Board to give Traditional Knowledge the same weight as scientific knowledge into EIAs. It is typical of ToRs to have a line item where the developer identifies how in each section of a development plan how and to what extent TK has been incorporated. Just a heads up that that will be a typical line item in Terms of References, and we may want to explore to what degree that has been addressed at this point.*

## **Vegetation**

### **Tyhee Presentation:**

- Potential ecosystem fragmentation and loss of rare plant habitat
- Possible impacts from dust suppressant activity, and herbicide, etc.
- Emissions from power plant and vehicles may also be an impact

Anne W – when would the developer use herbicides and why?

Developer - Probably in spring/summer/fall. Similar to what you would use for your grass. Not sure why, but if we wanted to curb growth, then we would use herbicide versus pulling it up by the root.

Anne W – Road salts have been recommended to be listed as a CEPA toxic, therefore we would recommend that they are a poor choice for dust suppression, there are other compounds available, and even basic water is an effective dust suppressant. We recommend water.

Developer - Point taken.

Todd Slack – Please clarify between degraded and destroyed vegetation, and quantify each. Also, ENR has done a good deal of study on vegetation energetics and implications on population size.

This would help us in understanding the impacts of the mine on caribou. We would like to see a revegetation study commence as soon as mine operations begin. Since the diamond mines have had extra time to start vegetation studies due to their long mine life, your trial and error studies need to start immediately.

Developer - Point taken, and we note the same point.

Mark C – will vegetation management plans come out in closure and reclamation plans or where? How will you deal with revegetation?

Developer - You are talking about closure or progressive reclamation?

Mark C. - Yes

Developer - Will be included in Abandonment and Restoration plans – as a component of the Environmental Management System.

*Alistair M – Indian and Northern Affairs (INAC) are always heavily involved in the closure and reclamation component of environmental assessments, and reclamation is always a major aspect of water licensing. The more the developer and INAC compare notes on what is expected, the more effective those plans will be at an earlier stage than if no consultation occurred here.*

Mark C. – we can certainly provide the closure and reclamation guidelines we have for posting on the Public Registry, and we welcome inquiries and comments for the guidelines.

Erika Nyssonen – ENR/GNWT – we have put together a working group for the closure and reclamation of BHP Billiton that includes both regulators and industry, and we would suggest that maybe Tyhee consider that as an option for creating closure and reclamation plans. That would be up to the Water Board, but we would suggest that option as well

Developer - This may be nitpicky, but we would like to remind those present that this is not a diamond mine, it is a gold mine, and we need to keep that in perspective.

Rachel C. – YKDFN – We would like representation on any committee that does form, and would like to know who else sits on those committees. This land is in Chief Drygeese territory, and as a result we want active participation in the processes that direct development here. We need to know how reclamation and closure will occur.

### **Socioeconomic Issues**

**Tyhee Presentation:** The plan is to hire local as much as possible, but the local work force is pretty well tapped out in this area with the diamond mines. Instead, Tyhee is where they are able to build better community capacity in First Nations Groups (YKDFN and NSMA).

Paul Mercredi - What do you anticipate being the total number of people on site, both while you are in construction and in operation?

Developer - Looking at a work force between 160-190 people, and the camp would be built for 120 people, with 80 to 95 people on site at any one time.

Joel Holder – GNWT – You indicate that you will be contracting out mining services; we would like to see as part of your screening criteria that you will hire contractors who have similar commitments to hiring Northerners.

Developer - I hear that concern, and we will try to incorporate into our policies. We can always encourage those types of policies, but we need solid services for what we are

paying for, and that is our main concern. If that employs local hiring, that is great, but we really need to have a guarantee that our camp will be built on time and will operate effectively.

*Alistair M. – Joel has mentioned something that could be a commitment from the developer, we will not hold Tyhee to that at this time, but the Terms of Reference may ask what types of policies, plans and programs the developer will have to maximize local employment. Tyhee can expand on those commitments in the DAR.*

Todd Slack – Due to the *Fisheries Act Schedule 2* nature of program and the subsequent presence of non-mitigatable impacts, the need for an Impacts-Benefit Agreement should be recognized as early as possible. We would also like to see a more thorough description of the anticipated contracting process, with focus on how Aboriginal companies can compete and participate. Yes, the local workforce is reaching a maximum employment level, but the developer can adopt a skill career development plan that would allow Northerners and members to identify how they could move into management stream from menial jobs.

Developer - Good points

### **Archaeological Issues/Cultural Heritage Resources**

#### **Tyhee Presentation: Archaeological, cultural and heritage issues**

- 2004-2005 site surveys
- Portages and other activities in the area.
- According to surveys, the area is not heavily used by First Nations prior to euro-canadian contact.

*Alistair M. – Is the existing archaeological database at the Prince of Wales museum extensive for this particular area?*

Developer - I cannot comment on the PoW museum database. We hired our own consultant, who conducted their own investigations and had to file the resulting reports with the Prince of Wales museum. Those reports have also been provided separately to the YKDFN

*Alistair M. – I bring this up, since in past EAs some parties have taken the position that in areas where extensive archaeological studies have not been done, an absence of known sites means that none exist. We wanted to indicate that this is an erroneous position. Extensive archaeological work is a better indicator of the absence of sites, than a lack of known sites. The Prince of Wales will typically provide that information in EAs.*

Developer - We have not heard any concern from any parties that the work we have done is inadequate. Also, we have only investigated potentially impacted areas, not a wide swath around it

Todd Slack – Tyhee should meet with present chief and council regarding the changes in development from 2005. The 2005 consultation does not apply anymore, and present chief and council would appreciate new information. We would also like to see a discussion of what was learned in consultation and what changes were made as a result of consultation. What other issues may advance as a result of additional cooperation between Tyhee and the YKDFN?

Developer - We intend to continue dialogue with both groups we have been dealing with. We have met this week informally with staff and looking at business opportunities with local organizations. Our dialogue will continue with those groups.

Mark C – Please explain the difference between prehistoric sites vs. archaeological sites. You have indicated three pre-historic sites recorded, but no archaeological sites found. Please clarify those distinctions.

Developer - No archaeological site found in the project area. A 1989 study conducted north of the Nicholas Lake camp recorded pre-historic sites there. There were no sites in the project footprint study area, winter road or potentially impacted areas– no sites were found. Sites documented in appendix.

Rachel C – YKDFN – Regarding Archaeological/cultural issues – you mentioned that you might have had an elder on site. We would like further information on that meeting, and further consultation that will involve more of our elders present. We would like to see more extensive archaeological work in the area as well, since some of our members have indicated that their parents have trapped and hunted there in the past. It is also possible that some sites have disappeared from previous development; we want to make sure that that may not happen again. We would like to see how what effects an increase in traffic from construction through development will have on sites. There is a place near the site where some of our elders indicate traditional games occurred. We need active participation for any developmental plans in this area. We have some members that would be upset if they were not able to participate in the archaeological aspect of this development.

Developer - As you know, we had elders to site in 2005, and we provided the archaeological reports to you as well. We are always open to further dialogue.

**2:20 pm Break**

**2:40 pm Reconvene**

### **Other Issues**

Todd Slack – YKDFN – Increased road access will increase squatters and illegal access, which will further affect the previously mentioned per-unit hunt effort. What efforts can be made to restrict access on this road? We would like some sort of discussion that refers to that issue.

Developer - Access is limited to the winter season. We would like to limit access to the road, but restricting access, even on the Tibitt to Contwoyto Winter Road is a controversial issue, and is beyond capacity of proponent to solve. The process here has to evolve with various parties. Monitoring is an easy task, but restricting access or activity really is in a different realm than Tyhee can deal with.

Todd Slack - All the climate on meteorological data are based on recent or historical databases. Although mine life is approximately 13 years, we would like climate change implications to encompass a 25 year outlook.

*Alistair M. – this line of questioning, that includes climate change, permafrost, precipitation, etc. fits under the ToR heading of Effects of the Environment on the Development. As such, the developer is expected to predict what types of effects the surrounding environment will have on the project, to the extent that those influences may cause an impact to occur.*

Todd Slack - In the PDR, climate numbers are based on YK records or on-site records from 2004-2005. Your water-balance figures for example, and other data that needs to incorporate local temperature regimes in the area should encompass how climate change will influence that data

over the next 25 years. There should be inclusion with respect to water balance, for example, of a 25 year climate change scenario, and ensure modeling will handle those different numbers etc.

Developer - Predictive models?

Todd Slack - Yes

Developer - Our intent will be to have a continual database building and we will monitor for changes in various parameters.

Todd Slack – We also have an issue with the absence of Closure and Reclamation plans. Without a solid understanding of what Tyhee will do in this area, we cannot assess exactly what the benefits and impacts of any plans will be, which limits our ability to contribute to a solid assessment of this project. We would also want a description of what the site will look like from a holistic perspective; we need cradle to grave analysis. For example, what will pits look like? Holes in the ground? Will you fill the pits in, or will there be pit lakes? These are important questions, and we would like the impacts quantified. This will help us to determine whether or not we want the project to proceed or not. Also, will there be further arsenic/mercury contamination? We are still dealing with that contamination right now. There are also concerns regarding cyanide and its byproducts. What are the cost estimates for Closure and Reclamation. This type of information will give us a starting point for discussion. Without this information, we feel that the PDR is incomplete.

Developer - We will obviously need a closure plan for the DAR, as well as for the licensing phase, including a cost breakdown for cleanup and abandonment. The Water Board has deemed our application complete to get to this stage of the process, so there may be some confusion if you are referring to the PDR. Or were you referring to the DAR?

*Alistair M – Obviously, a number of parties have indicated that they would like to have seen closure and reclamation plans in the PDR. I can say that the Review Board will expect there to be, at least at the conceptual level, some indication of closure and reclamation plans in the DAR. No one is suggesting nor do we expect the PDR to be revised. This is information that can come in the DAR.*

Todd Slack – The PDR was also deficient in a discussion of cumulative effects. Firstly, this one mine may have limited effect on caribou by itself, but this is a herd that is also affected by other mines in the area. We require a discussion on those effects. We would also like a discussion of how the YGP induces further development in the area. For example, one mine hauled or to a nearby project for processing. The presence of YGP may change the economics of other developments in the area. We would like an interpretation of what impacts this may cause.

Developer - Cumulative effects is a good concept, but it is difficult to assess cumulative effects, as well as to try and predict what other projects will do.

Todd Slack - The uncertainties are understood, but if we do not try to model it, then we are powerless to understand what effects there may be. If models are not predictive, we aren't looking at holistic effects of other projects. We will need benefits and cost accounting. What is the value of the natural capital affected by this development? Flora and fauna and surrounding environment has value that is not zero. This would help us to better understand the impacts of this project. An example is the BQ Caribou Herd organization recently released the figure that every caribou harvested is approximately worth \$1000. With this process, if the minesite were to affect caribou, then we could assess what the value of those impacts are in dollars, and would help us cost account the impacts of the project, so that the project is not getting a natural subsidy if it goes ahead. We would account for the costs in environmental degradation.

*Alistair M – That type of cost/benefit analysis and natural capital evaluation exist in ecological economics, and has limited success with incorporation into EA, but it may see more success in the future. If the YKDFN feels that this type of analysis is important, we would suggest that the YKDFN clearly indicate exactly how this type of analysis can be done. The Review Board is open to how to better evaluate the cost/benefit aspects of natural capital.*

Todd Slack – The PDR indicated that both underground and open pit methods are viable. Since the open pit method is much more destructive, it complicates tailings, reclamation and other scenarios. We would like a justification for the choice of preferred method.

Developer - Open pit is just more economically viable. It is cheaper, and mistakes along these lines can lead to mine closure, as a diamond mine did recently. In our case we have to do both

*Alistair M - the consideration of alternatives is a common aspect of EAs. What makes sense to a developer may not make sense to others. It is best for the developer to indicate exactly what rationale led to a particular choice, and provide that rationale just to make it clear to involved parties.*

Todd Slack – Good point. On another point, the terminology in PDR uses vague language, for example, the word ‘minimize’ is used repeatedly, and there is also the reference to both open pit and underground options being viable. We would like to see this vague language disappear in the next phase, with more concrete, committal language that will give us a level of certainty for what is planned. We would also like a transparent, multi-criteria assessment of the different alternatives that explains why a particular option is the best or only option to choose.

*Alistair M. – it is worthwhile for parties to indicate exactly what criteria the developer should include and compare in this multi-criteria analysis.*

Todd Slack – We will submit those criteria in our written submission. We are concerned with the security associated with project. The Discovery remediation was a six figure remediation project, and since Tyhee is a small company, we want to make sure that there is no environmental legacy from this development.

*Alistair M – security – Review Board not involved in securities – this happens during the water licensing phase of permitting. INAC will analyze what the remediation costs will be if the developer went out of business, and provides that amount and advice to the Water Board during licensing.*

Developer - The abandonment and restoration plan forthcoming in the DAR should have a cost breakdown, and this figure will reflect negotiations with INAC.

Mark C – Regarding water quality and the Tailings Containment Area (TCA) – the PDR indicated that storage will be subaqueous, which I assume is underwater, and depending on how deep the water will be it is possible that oxidation of tailings may occur. We would like a more thorough examination of this phenomenon. Have you considered paste backfill with regards to tailings management in the underground portion, and/or pit filling as a closure and reclamation approach. Basically we would like a further explanation of why you are choosing these options over other methods. The more detail the better.

Developer - Part of the ARD plan that we filed with the Water Board should discuss ARD-study results with respect to tailings. Paste backfill is an alternative that is usually looked at in mining. Knowing whether or not paste backfill is an alternative is knowledge that comes with mine life, since you can identify where you are placing the

paste. Also, we will be producing tailings before we would have anywhere to put it, since we will enter the underground phase at a later time. We need an area to put tailings. Paste Backfill might be an alternative, but it may not be the best for this particular deposit. We will know at a later time.

Mark C. – The PDR referred to an engineered tailings dam for the Winter Lake Tailings Containment Area. What type of work has been done in that area? What type of dam will you construct here? We would like to see more details on that in the future.

Developer - The dam will most likely be rock fill, maybe with a clay core, or a liner of sorts. The actual dam design will be in the DAR. Any design would have to be impermeable on its perimeter. This is different than what we submitted in 2005. The dams in the lake at that time were leaky since that area would be a polishing area, which we no longer have in our plans. The water that would have gone to the polishing area will now be pumped up into another part of the tailings area to assist with the subaqueous component of disposal.

Emma Pike CARD/INAC – Discovery Mine Remediation is complete from INAC's perspective, and long term monitoring program is in place. We would like to thank Tyhee for cooperation and hospitality during the remediation effort. INAC recently developed damage criteria for the tailings cap associated with their current Land Use Permit with the Water Board. Regarding the acceptability of future use of the airstrip, we would like to note that any discussion and agreements held to date have been for ongoing current usage of the airstrip, but further work needs to be done regarding future expanded use of the airstrip and tailings cap area, in light of mine construction and operation that will increase traffic. INAC considers any remediated works (tailings cap, landfill and other engineered features) from the previous development as aspects of the existing environment, and any changes to those engineered remediations require mitigation by Tyhee. INAC would be interested in the results of your aggregate study, and the implications of that on future airstrip locations, since there are risks associated with continued use of the airstrip.

Developer - As part of the Land Use Permit amendment for current use of airstrip access road, laydown and coarse ore storage area, we had to put instrumentation into various facilities around the site. Reports containing that data are filed on an annual basis apart from water licenses. If Review Board wants them, we can produce them. We intend to continue using and eventually upgrade the airstrip design, we provided an upgraded design as part of the current Land Use Permit, so that it can handle aircraft from INAC and Tyhee, up to the Dash 7 level. We can look at alternatives to the existing airstrip. Our goal was to minimize impacts, not create new ones. We do want a suitable facility that will support the project, and optimizing the airstrip fit with that theme. We will continue discussions with INAC regarding continued activities with the tailings cap.

*Alistair M – We suggest that if INAC wants further impact analysis into airstrip from usage, INAC should submit those criteria for posting on Public Registry as part of the INAC scoping submission. Also, the Review Board would be interested to learn just how extensive monitoring and maintenance activities by INAC are ongoing in the area.*

Emma P. – We can certainly provide the criteria. It is on the Water Board registry, and we developed that with Tyhee and EBA and another engineering firm. Our monitoring plans are extensive, and include annual geotechnical inspections. We will be doing this until 2010, then we will review the scope at that point. The plan focuses on water quality in Giauque Lake, around the tailings cap area, as well as discharge from a local pit. No planned maintenance at this point.

Developer - We have a similar geotechnical monitoring program as part of our land use permit. We would like to reiterate that discussions between INAC and Tyhee will



continue as project moves forward. We want to use facilities that are available rather than build a new one.

Joel Holder – If individuals are already tapped for employment in Yellowknife, can Tyhee provide a better description of the economic benefits for the NWT or Yellowknife if the mine goes ahead? This would help us assess the positives associated with the development, for example local contracts. Since there may be a low percentage of qualified individuals for hire, what are the economic benefits to the North if there will not be a great deal of people employed in the North,?

Developer - The socio-economic analysis in the DAR will address some of those issues. Diamond mines have labour force from south. This clearly indicates a tapped out labour pool. In light of this, we ask how else can we benefit the communities, and one answer we came up with was to have joint-venture contracts within the aboriginal communities. We will look at what they can provide, and move forward from there. There is also the Mine Training Society, and how that will contribute to better employment numbers for Northerners. Also, as some of the mines close, the labour pool may increase. We have to operate with who we can get if the labour market is tapped out.

Anne W – I think we can certainly add to what we contributed for the 2005 Terms of Reference, rather than start from scratch. The DAR will have to address a good deal of information that was not addressed to this point. In order to minimize the amount of Information Requests after the release of the DAR, we would strongly recommend the Review Board hold a technical session after the DAR release.

*Alistair M. – a recurring suggestion for our EA process encompasses a DAR rollout with informal question and answer periods. We are open to that suggestion.*

Todd S. –We expected to hear more regarding the destruction of Winter Lake and associated issues. Of the twenty or so lakes that have had to be redefined as Tailings Impoundment Areas under Schedule 2 of the Metal Mining Regulations in the Fisheries Act, all have had to undergo a board review with the exception of one that was rejected at the level of screening. We will be looking for the same level of scrutiny for Winter Lake.

*Alistair M - A CEAA panel with comprehensive study?*

Todd Slack - Something along those lines.

Developer - This Schedule 2 process and accompanying negotiations always occur after an assessment, and that occurs with Environment Canada and DFO. We are having continued discussions with Environment Canada and DFO.

*Alistair M - Most of the EAs with Schedule 2 implications would have fallen under the jurisdiction of the Canadian Environmental Assessment Act, and it is a similar process. In many cases in the south, there was enough concern or potential impacts for the EA to move into the Impact Review phase, which is a similar phase for the Review Board here. We would like to see more information on that process and what implications it had with the EAs down south as part of the scoping submissions. What aspects of this project make the EA likely to go to review? Parties can speak to that issue in their submissions if they so choose.*

Developer - The two examples that DFO and Environment Canada mentioned earlier as good guides for how an EA can proceed, Doris North and Meadowbank, went to Part 5 Reviews in the Nunavut Impact Review Board process. This is not the full CEAA

Review, and we see this EA as potentially reaching that same extent as the Nunavut examples.

Rachel C. – YKDFN – We would like to know when and if the EA will head to panel review. We would also like to know at what phase we can analyze the information and ask more questions. How will that work.

*Alistair M. - The Review Board at some point will determine whether or not to move the EA to impact review from impact assessment. A scoping hearing generally precedes that decision, if the parties involved feel the associated issues need a more detailed analysis. The Review Board gives thirty working days notice before that occurs. The developer recognizes that there are information gaps, as identified today. We issue Terms of Reference for the DAR, which is intended to be a source of better information. We look forward to detailed scoping submissions for the upcoming deadline.*

Rachel C. – YKDFN – how will we know whether or not public concern is enough?

### **3:46 pm Closing comments**

Hugh Wilson: Tyhee will have more people for answering technical sessions when the specifics of the DAR are outlined in the ToR. We would like to have the Review Board scope the development for what it is: a small gold project. The last Terms of Reference were fairly broad-based. We expect clear and concise ToRs reflecting this small project.

### **4:00 pm End of Session**

Mackenzie Valley  
Review Board



**YELLOWKNIFE GOLD PROJECT ENVIRONMENTAL ASSESSMENT - DISTRIBUTION LIST SIGN UP SHEET**

<b>Community:</b> Yellowknife		<b>Meeting Date:</b> YK / NN
<b>Facilitator:</b> Review Board		<b>Place/Room:</b> Oct 16 / OS
Name	Organization	
1. Jessica Simpson	Review Board	
2. LIONEL MAREMKOSKI	INAC - E/C	
3. GROW GREEN M/V		
4. Anne Wilson	EC	
5. Dave Fox	EC	
6. Al MacDonald	MVEIRB	
7. Nicole Spencer	MVEIRB	
8. Q.10		
9. Louise Seale	INAC	
10. Ryan Silke	NWT + Nunavut Chamber of MLES	
11. Jennifer Drygeese	YKOFN	
12. Marc Casas	INAC-WRO	
13. Chandra Venables	ENR - Wildlife	
14. JOEL HOOPER	ENR	
15. Zuniqua Nilakantha	INAC - Communications	
16. Tricia Melander - Forde	INAC - Communications	

Mackenzie Valley  
Review Board



**YELLOWKNIFE GOLD PROJECT ENVIRONMENTAL ASSESSMENT - DISTRIBUTION LIST SIGN UP SHEET**

<b>Community:</b>	<b>Meeting Date:</b>
<b>Facilitator:</b>	<b>Place/Room:</b>
Name	Organization
17. Erika Nyssonen	ENR-GNWT
18. Sarah True	"
19. Todd Slack	YKDFN
20. Paul Mercet	MVERB
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