
Minutes for NWTWB Pre-Hearing Conference and Technical Meeting
Inuvik-Tuktoyaktuk Highway Project: Application N7-1-1835
September 16, 2013
NWTWB Inuvik Office- Suite 302 Professional Building
125 Mackenzie Road, Inuvik, NT

Attendance:

(See attached list of attendees)

Meeting Convened 2:30 pm

Conference Session Opens

Ron Wallace: Interim Executive Director, NWTWB: *Ron introduced himself and took the attendance and welcomed those who attended in person and on the phone. The rules for proceeding were explained. Individuals were to identify themselves before speaking, and only one person at a time was to speak. The chair designates who will ask questions and who will reply. He explained that this was a technical review and not an ITH hearing. The hearings will take place at the Board's designation October 7 in Inuvik and in Tuktoyaktuk on October 8. The Board has not as yet decided if the hearings will proceed. The Board will announce whether it will proceed to that hearing. This meeting concerns itself with technical aspect of water management only. Those with environmental concerns were directed to the previous EIRB, Environment Canada CEAA documents related to the broader environmental issues. The NWTWB has final water licensing authority for water use in the Northwest Territories. Copies of the Waters Act, relevant guidelines for designing and implementing aquatic effects monitoring programs, the rules and procedures of the Board, the Board newsletter, which contains contact information for follow-up was provided to the participants. Copies of the Board's mandate were also made available to participants. He stated his intention to end the hearing at 5:30 and that provisions had been made if it was not possible to finish in time to continue at 8:30 the next morning. He acknowledged the generosity of the Proponents in allowing this option. The format will be for a question to be asked of the Proponents as laid out in the agenda that was approved September 10, and a list of questions provided to the Proponents. There has been extensive communication between the Board and the Proponent. The Proponent's responses to questions are posted on the public registry site of the Board's website. Information is also on file at the Board office in Inuvik and in Yellowknife. Gerry Phillips, legal counsel for the Board was introduced. He will explain the rules and procedures. Ron invited the Proponent to give an over view of the project.*

Technical Discussion Session

Jim Stevens: Developer DOT: Thank you Mr. Chair. I do have some short comments and a project overview. The Department of Transport appreciated the opportunity to be here in Inuvik today to provide NWT Water Board Technical staff and advisors and other parties with additional details and clarity on information filed to date and information still to be provided related to the construction of the Inuvik to Tuk[tuyaktuk] Highway. In particular Mr. Chair, we are prepared to respond to the initial list of questions in the Pre-Hearing Conference technical questions issued September 13th and any other issues

that parties here today would like to discuss or have questions on. As you are aware, the Inuvik Tuk highway project was approved by the Environmental Impact Review Board on January 25 this year and by Canada on April 4th subject to certain terms and conditions and the developers commitment. These approvals have set the stage for the construction and operation of 140 kilometres of all-weather highway between the communities of Inuvik and Tuk. The construction includes: winter development and operation of water sources, winter construction of 120 Km of new embankment, construction of 68 permanent water crossings, and approximately 400 drainage structures, summer embankment compaction surfacing and grading, construction and operation of winter roads and access trails, winter and summer operation of temporary camps, winter and summer operation of temporary storage areas, transportation of fuel, waste and equipment and personnel and storage of fuel. Through the information provided to the Board we are confident that we can demonstrate that our actions to construct the Inuvik-Tuk highway will fully align with the Water Board's vision of clean and plentiful water available today and into the future. Thank you Mr. Chair.

Ron Wallace: *Thank you. Any questions or comments regarding the introduction? Hearing no questions or comments we will now move forward into the next part of the agenda which is the technical information discussion.*

Billy Archie: Chairperson Aklavik Community Corp and Fisheries Joint Management Committee: We want to look at the recommendations that came out of the review board. ...there has been an incidence with source 177 I believe, culverts were collapsed. I just want to make sure we are following up on recommendations made by the review board.

Ron Wallace: *An explanation of the agenda was given. It was requested that the participant hold this comment until the comments from the regulators were heard.*

Billy Archie: OK

Ron Wallace: Any comments from Fisheries and Oceans?

Kelly Eggers: DFO: We have no comments.

Ron Wallace: ... to refresh everyone's memory DFO had submitted quite an extensive list of concerns to the Proponent, and the Proponents responded to that. I just wanted to alert people to the fact DFO have already commented and provided these comments to the Proponents and the Water Board. Next GNWT-ENR.

Steven Charlie: GNWT ENR: No comments at this time.

Ron Wallace: Is there any representative from Environment Canada present? (no response) *Ron asked the CanNor representatives that if an EC representative came in later that they be identified and he would give them time to comment.*

Next AANDC.

Robert Jenkins: AANDC: Our comments have been submitted to the Board previously regarding an assortment of management plans. It would take some time to go through all the details. In essence we feel the project can be managed through management plans submitted to the Board. Some key plans are sediment and erosion control, waste management, etc. Many of the questions from the Board are also of interest to us. It is preferable to defer some of the technical questions that we have to the ones that will be asked by the Board. We would like the Proponent to comment on updates that need to be provided. What is the Proponent's appetite to receiving feedback on management plans?

Jim Stevens: We will be providing a number of updates during the technical questions that have been issued by the Water Board on management plans, so we will defer until that point.

Robert Jenkins: We don't need to go over the fine details at this hearing. We just want confirmation that the Proponent is willing to update the plans and to work with our department and others.

Ron Wallace: Does anyone else from AANDC have anything to say?

Conrad Baetz: AANDC: In some of the reports we have received to date there could be additional information that I'd be interested in. Do you know specifically which plans are going to receive updates? In particular, is the erosion control plan one of them?

Jim Stevens: The Proponent is anxious to work with all the regulators to ensure that all the management plans meet the test of those various agencies. We continue to work on updates. Three we are working on are: waste disposal, explosives, and the spill contingency management plan.

Ron Wallace: The Proponent has agreed that if the answers require more complex responses they will follow up in writing with greater detail. The Board will ensure that additional information is posted to the Board's public registry.

Conrad Baetz: For clarity, Aboriginal Affairs can have a dialogue with the Proponent regarding changes we would like to see.

Ron Wallace: That's perfect, and I think that is an acknowledgement of the fact, and we appreciate you putting that forward.

Robert Jenkins: Is there a list of the plans that are part of their licence? What are they or should I ask later?

Jim Stevens: The plans that are in place, or will be forth coming September 20th are: Sedimentation and erosion control, waste management, explosives management, fish and fish habitat, emergency

response, safe work practice handling petroleum, safe work practice fuelling equipment, spill contingency, spill response procedure, and aquatic effects monitoring plans.

Robert Jenkins: So the Proponent is amenable to having all these plans in place as a condition of licensing?

Jim Stevens: Yes, the Proponent is amenable to that.

Conrad Baetz: It is worth noting there will be continued discussion and review of information we received. There are other issues that our department is responsible for that are related to the project.

Ron Wallace: Thank you for that discussion. The Board staff are sensitive to what has been said and we have heard very clearly what you have had to say about possible approaches to licensing. We heard that AANDC has overlapping jurisdiction, particularly on the land side, and they will be pursuing these issues with the Proponent before the licensing process is completed.

We will now turn to ILA.

Mike Harlow: ILA: We have no questions directly for the Proponent, and echo what has been said by AANDC.

Ron Wallace: Discussion is open to the floor.

Billy Archie: We had some concerns about the hiring of environmental monitors.

Mike Harlow: That's outside the scope of this meeting, but I will respond. 99% of the environmental monitors are hired by the ILA.

Billy Archie: Thanks.

Community Representatives

Billy Archie: Communities and community organizations often have trouble attending these types of meetings due to lack of funding. We just need assurance that there are processes in place to mitigate any problems.

Ron Wallace: The Board welcomes community involvement. The Board does not have a funding mechanism. We will be holding public hearings in Inuvik and Tuk in October, and we welcome attendance and participation. Freda Wilson is here to provide you with any information you might need.

The Board has sent information out in the forms of CDs for documents too large to email. We will send whatever information people need.

Billy Archie: The community is still learning things about the project, and we hope to be able to apply what we learn here in the future.

Ron Wallace: Bernice Joe, any comments.

Bernice Joe: ICC: No comments, but it is good to see faces and this is very informative.

Ron Wallace: Gerald Inglangasuk, any questions?

Gerald Inglangasuk: ICC: I am on the Hunters and Trappers and we are concerned about slumping. Are we going to monitor the slumping?

Ron Wallace: I just want to clarify that slumping is not generally an issue affecting water quality. I would like to narrow the question with Gerald's permission to how slumping affects water quality.

Jim Stevens: Is the question specifically on borrow sources?

Ron Wallace: Yes

Walter Orr: Kavic Stantec/DOT: We will be doing a number of things to deal with borrow sources which include the following: ensuring sufficient ice cover to maintain the permafrost, shaping the pit to provide drainage with no standing water and monitoring the pit over the first few years.

Gerald Inglangasuk: What about the part of the road that goes between the Husky Lakes? That will slump.

Jim Stevens: There will be slumping with or without the project, it is common in permafrost areas. Permafrost mitigation measures have been considered including additional embankment height, rout alignment that reduced the proximity to water bodies. We are making our best efforts to prevent any slumping.

Ron Wallace: Any other questions or comments?

NWTWB Staff

Ron Wallace: The Water Board's 14 questions have been widely distributed and we will begin these questions. The NWTWB Technical components will be conducted by Jamie VanGulck who is our technical team leader and Jason Thorpe is part of the technical team.

Jamie VanGulck: NWTWB: NWTWB IR #1 requested the names and addresses of all contractors and subcontractors anticipated to work on the ITH are required per Schedule III of the application. To date this information has not yet been submitted.

When does the Proponent plan to provide the names and addresses of all contractors and subcontractors to the NWTWB?

Jim Stevens: In August the GNWT authorized a regional contracting entity with considerable experience in the ISR and with road building negotiations. We expect to be able to name that contractor and sub-contractors in early November.

Jamie VanGulck: In response to NWTWB IR #2, the Proponent has submitted geotechnical information for most aggregate sources. No geotechnical information for Source 177 was submitted, and only providing partial geotechnical information for Sources PW18, PW17, and PW13 was submitted. The Proponent has noted that additional geotechnical investigations are planned for 2014. I would like to state that the Water Board recognizes it does not have jurisdiction regarding granular resource management on ILA and Crown land, and that granular resource management is deferred to the ILA or Aboriginal Affairs. The Board is only concerned with regard to it on a narrow scope pertaining to water management and the granular pit and look to cooperate with the land owners.

Source 177 is a Year 1 aggregate source based on information submitted. When will geotechnical information be provided for this source?

Jim Stevens: The development of source 177 is already authorized by the ILA. No geotechnical investigation is planned.

Jamie VanGulck: When will the remaining Year 2 and Year 3 aggregate source geotechnical information for PW18, PW17, and PW13 be submitted to the NWTWB?

Jim Stevens: PW 13 and PW 17 are no longer being considered for development. Additional geotechnical information for PW18 as well as geotechnical information for sources 174, 309, 312 west, PW 19a, GSC 3, and GSC4 will be available by July 2014 after planned investigations this winter.

Jamie VanGulck: The information submitted contained no information regarding the geochemistry of the aggregate and the associated potential for Acid Rock Drainage and Metal Leaching. ARD/ML of the aggregate has potential to interact with the water in the receiving environment. What information exists to understand ARD/ML potential from the pit/quarry materials?

Jim Stevens: The materials will not be processed crushed, as a result the interaction between the materials and surface water is not expected to differ than that which occurs naturally. Geotechnical investigation performed by DOT does not include geochemical analysis. One final point, the DOT is not aware of this requirement for pit licensing.

Jamie VanGulck: So, has there been any testing of the pit for ARD materials?

Jim Stevens: The DOT has limited mineralogical information about constituents of certain borehole samples. Included in the weighted percentage of sedimentary, igneous, volcanic, and metamorphic particles of various size sifts.

Jamie VanGulck: In response to NWTWB IR #10 and IR #20, the Proponent submitted Pit Development Plans for Year 1 aggregate sources. Year 1 aggregate sources include Sources 177, 170, PW10-11, and I401A. The Pit Development Plans note that positive drainage of water from the pits will be maintained to avoid formation of pit lakes. Discharge quantities of this water and its quality are not discussed in order to address Section 6(2)(f) of the NWTWR. Discharge from pits is considered a waste discharge. It is noted that the Pit Development Plans discuss abandonment of the pits to address Section 6(2)(h) of the NWTWR.

For Year 1 aggregate sources, Pit Development Plans were submitted for all sources except 177. When will the Proponent submit the Pit Development Plans for Source 177 to the NWTWB?

Jim Stevens: The development of source 177 is already authorized. A water licence has not been required, and I should note that we are going to operate that pit as we do all other pits with a closure and reclamation plan.

Jamie VanGulck: When will the Proponent submit Year 2 and Year 3 aggregate source Pit Development Plans to the NWTWB?

Jim Stevens: In the summer prior to pit development. The plans will not differ from those used in Year 1. All these plans will be submitted to regulators who need to approve them.

Jamie VanGulck: I noticed the Water Board was not an organization to submit the pit development plans to. Was that an omission?

Jim Stevens: Pit Development Plans will be submitted to the Board as information.

Jamie VanGulck: How is runoff/surface waters that come into contact with the pits managed before discharge to the receiving environment?

Doug Chiperzak: Kavik Stantec/DOT: Runoff is not treated *per se*. Runoff will be directed into vegetated areas and this will clean the water of potential sediments.

Jamie VanGulck: If water from the pits is released to the receiving environment, what is the expected quality and quantity?

Doug Chiperzak: The quality is unknown; it depends on how much sediment gets picked up. The quantity is also difficult to calculate as part of it comes from snow and precipitation. It will be directed through vegetated areas, we expect that once it arrives at a receiving body it will be at the same natural quality levels.

Jamie VanGulck: If water from the pits is released to the receiving environment, what monitoring will be completed? Can you explain the monitoring of that water?

Doug Chiperzak: We will be conducting TSS and turbidity on a monthly basis starting with spring breakup and we will also be doing conductivity monitoring that was recommended by Aboriginal Affairs. This monitoring will continue until freeze up.

Jamie VanGulck: The Fish and Fish Habitat Protection Plan references monitoring of the borrow sources in response to use of explosives. What is the frequency of water quality monitoring and the locations for water quality monitoring specific to this plan?

Doug Chipertzak: The use of explosives will be limited to the winter time when there is snow and ice cover. Monitoring for ammonium nitrates which is the main concern will be conducted on the snow prior to any blasting and each month after that to determine if there is any accumulation. We don't expect there to be any problems with ammonium nitrates. We expect 100% combustion with all our charges.

Jamie VanGulck: The last question deals with closure and reclamation specific to source 177. I believe the Proponent commented earlier essentially stating that the closure and reclamation would follow similar activities and plans as other pits. Has that been provided in writing?

Jim Stevens: There hasn't been one specifically for 177, but our actions there will be similar to the three already submitted.

Jamie VanGulck: Per NWTWB IR #6 and IR #23, the Proponent submitted a design package for watercourse crossings and the embankment. This included a design report and applicable drawings for each watercourse crossing, along with drawings for the embankment at 20 m intervals. The alignment drawings state "Issued for 100% Design" and are not stamped; while the structure drawings state "issued for discussion, not for-construction" and are not stamped. The design report states "issued for 100% design review" and is not stamped by an Engineer. Further the Proponent's response to IR #23 states the intention to submit specifications to the NWTWB; however, specifications were not submitted.

When will the Proponent submit 100% for-construction report and drawings, stamped and signed by an Engineer to the NWTWB?

Robyn McGregor: Kiggiak EBA/DOT: I will start by clarifying there is not a significant difference between the drawings and plans that you now have and what they will look like once authenticated (stamped and signed). We need to do our last internal review, and we are confident of the design as it now stands. We expect they will be stamped by mid to late October.

Ron Wallace: The drawings as they stand may be sufficient, but the Board will likely want a certified drawing before they issue a certified licence.

Jamie VanGulck: When will the Proponent submit for-construction specifications to the NWTWB as indicated in the response to NWTWB IR #23?

Robyn McGregor: They are included on the drawings.

Jamie VanGulck: Per NWTWB IR #9, the Proponent submitted letters from the Hamlet of Tuktoyaktuk and Town of Inuvik regarding waste transfer agreements. The letters were addressed to Northwind Industries, and not the Proponent (GNWT-DOT).

Is Northwind authorized to act on behalf of the GNWT-DOT to enter into waste transfer agreements with the Hamlet of Tuktoyaktuk and Town of Inuvik?

Can the Proponent provide written notification to demonstrate that the waste transfer agreements are between the community and the Proponent?

Jim Stevens: Northwind Industries have been engaged by DOT to do Highway design and environmental permitting and licence activities on behalf of the department. We are in the process of discussing with the Hamlet of Tuk and the town of Inuvik naming the DOT. We expect the letters in the next week. They are forth coming.

Jamie VanGulck: In Response to NWTWB IR #11, the Proponent provided information that the water usage by existing water licence holders will not impact other water licence holders in the region; however, no information has been provided to address Section 14(4)(b) of the *NWTWA* regarding water use and compensation for any other persons who may be affected by use or deposition of waste by this project. Further to this item, EIRB commitment #163 notes that the Proponent committed to performing public consultations regarding the ITH: "Commitment by the Developer to conduct consultations (after Public Hearings) with the Inuvik and Tuktoyaktuk Hunter and Trapper Committees, Inuvialuit Game Council, DFO and Transport Canada regarding Selection criteria for crossings; Use of water bodies; and Types of vessels." Additionally, Table 4-8 of the original application (p. 4-21) stated that consultation was performed for water sources, camp locations, and navigable waters for Inuvik in June 2013 (and planned for June 2013 for Tuktoyaktuk).

What consultation has the Proponent completed to satisfy EIRB commitment #163 with regards to water use?

Jim Stevens: DOT is compiling a consultation log including all notes from meetings. These include the EIRB public review, consultation with Inuvialuit organizations and meetings held with regulators. These include meetings regarding water use for recreational and traditional purposes. This consultation record will be submitted to the Board by September 20th. We should also note that the Inuvik-Tuk highway project has gone through a public review process and the public has had an opportunity to comment on the project and related water use during the EIRB review. We will include with our consultation record a cover letter indicating that no organization or individuals have come forward as potentially being adversely effected by the use of water

Jamie VanGulck: In response to NWTWB IR #13, the Proponent submitted bathymetric data for Year 1 water sources: however, not all water sources for Year 2 and Year 3 have bathymetric data submitted. Bathymetric data is used to understand maximum water withdrawal quantity.

When does the Proponent plan to submit Year 2 and Year 3 bathymetric data, and therefore maximum water withdrawal quantities for each water source, to the NWTWB?

Jim Stevens: Those plans have been received and we will present them to the Board September 20th.

Jamie VanGulck: Table 10 of the Proponent's September 5 letter reports water withdrawal volumes. There is higher volume withdrawn in the winter compared to the summer. Can the Proponent clarify if the reason for higher winter withdrawal is a result of winter road construction?

Jim Stevens: Yes, it is related to winter road construction. In tables 8-1 and 8-2 that was indicated.

Jamie VanGulck: Section 8.2 of the Fish and Fish Habitat Protection Plan references "daily recording of quantities of water withdrawn from watercourses during the summer". Could the Proponent clarify the location(s) and volume removed from watercourses?

Doug Chipertzak: We can't identify which watercourse crossings at this time. The volume of water is indicated in table 8-1 and 8-2 that will partly originate from water courses and partly from lakes. The amount taken will be less than 5%.

Ron Wallace: I would like to open the floor to any questions or comments.

Robert Jenkins: To confirm, the Proponent will submit information on September 20th. Will they also be submitting what they think is an appropriate amount of water withdrawal for their water licence?

Jim Stevens: Yes, it will be provided.

Ron Wallace: Any other questions?

Billy Archie: Will 5% water removal effect seismic activity?

Doug Chipertzak: 5% was the figure used for winter water withdrawal at one time within water courses and that was taken out of the protocols. For summer withdrawals, because there is more water in circulation, the 5% figure is a safe limit. Seismic activity was generally associated with winter activity where taking water from a watercourse can have a more serious effect than in the summer.

Billy Archie: I want to go back to a previous question 5b.

Jamie VanGulck: This question dealt with the waste transfer agreements. The Proponent indicated the written notification necessary is in process and will be available within two weeks.

Jim Stevens: I would concur.

Jamie VanGulck: Table 10 of the Proponent's September 5 letter specifies water withdrawal volumes for lakes that are "unlikely to support overwintering fish". As a result, the Proponent does not apply the DFO Protocol for Winter Water Withdrawal from Ice Covered Bodies in the Northwest Territories.

Does the DFO have an opinion on the acceptability of the maximum quantities of water removed from each source as detailed in the Proponent's September 5 letter?

Kelly Eggers: DFO: The Proponent has proposed conducting studies. If it can be demonstrated that a water body does not support fish habitat then there's no need to apply DFO winter water program.

Ron Wallace: I want to highlight to the room that the Board issued a letter on September 10, 2013 to the Applicant in which the Board set out a number of inquiries. I want to quote one of the comments, "additionally the Board is preparing a formal response to the applicant on the matter of the required water quantity and water quality monitoring plan and the Board plans to seek and discuss that issue at the forth coming Pre-Hearing Conference." I highlight this because the Board has made clear that this is of material interest to the Board, and that it has provided advance warning of the materiality of that question and the sufficiency of the response will be significant to the Board process. Jamie, please proceed with your question.

Jamie VanGulck: Further to NWTWB IR #15, the Proponent committed to providing a monitoring program to assess the long-term effects of water use. The Proponent has stated that it intends on initiating discussions with AANDC, DFO, ILA and NWTWB on this matter by October 31, 2013. The Proponent's September 5, 2013 letter provided a preliminary discussion on parameters to be monitored. EIRB commitment #222 relates to water quality monitoring, and reads as follows: "The Developer will prepare an effects monitoring table and an inspection table prior to construction. The effects monitoring table will describe the indicators and parameters to be monitored and the target or management goal. The inspections table will describe the types of inspections required, the frequency of the inspections, and which phase of the Project the inspection will occur."

How has the Proponent addressed EIRB commitment #222?

Doug Chipertzak: We have incorporated suggestions and the aquatic effects monitoring table will be available September 20th. We will ensure all the parameters that were asked about are included.

Jamie VanGulck: A follow up to that about pit water monitoring as well as the permafrost around the quarries. Is that part of that monitoring?

Doug Chipertzak: The monitoring for that is within the Sedimentation and Erosion Management Control Plan and there is also some monitoring for that in the Fish and Fish Habitat Plan. When we put together the framework we will consolidate all the aquatics effects monitoring into one document.

Jamie VanGulck: Could the Proponent provide details regarding the locations and frequency for permafrost along the embankment and quarries?

Robyn McGregor: It is continuous, what varies is ice and moisture content. The contractor will be selecting materials from ice poor areas. So, details regarding permafrost locations are everywhere.

Jamie VanGulck: I appreciate you are in continuous permafrost regime. What will you be monitoring if you will be monitoring everywhere? What are the parameters to measure, and where will those measurements be taken?

Robyn McGregor: If I understand your question correctly, I believe you are asking how and with what frequency we are going to monitor. The DOT monitors the highway for permafrost degradation through diligence in visual inspection by maintenance staff. We will also have ground temperature cables in

place that have already been installed. There will be an additional one installed when the highway is constructed below the embankment and below the structures themselves.

Jamie VanGulck: Where will this reporting be documented?

Jim Stevens: I will have an answer to the Board by September 20th.

Ron Wallace: I would like to conclude this section by saying we appreciate your responses. I thank you for your undertakings. I highlight to you that this is an issue of materiality to the Board and the forthcoming information will be warmly received as the Board moves toward the decision to proceed to hearing.

Jamie VanGulck: In response to NWTWB IR #17, the Proponent has submitted a Sediment and Erosion Control Plan. The plan includes monitoring aspects for frequency and location. However, it is not clear what culverts will be monitored. The Proponent states in Section 5.1.1.1 that “select culvert crossings” will be measured for water quality.

EIRB commitment #231 states that water quality monitoring will be conducted upstream and downstream of each crossing; however the Sediment and Erosion Control Plan states “select culvert crossings” will be monitored. Can the Proponent explain this apparent discrepancy?

Doug Chipertzak: It was our consideration that for watercourses not deemed to be fish habitats it would not be beneficial or useful to monitor all those watercourses. The crossing that are suspected to be fish habitats, or which are fish habitats will be monitored.

Ron Wallace: I would now like to open the floor to comments.

Paul Green: AANDC-WRD: I would add that a stream may not be fish habitat directly but if it leads into a fish habitat it may have some affect and this should be considered.

Doug Chipertzak: These streams are ephemeral, they don't have defined channels, they run across vegetation, the fact that they may provide some nutrients would be minimal. It is unlikely that aquatic invertebrates would establish themselves. Vegetation also reduces the risk of any sediment from entering a receiving body.

Jamie VanGulck: EIRB commitment #231 provides a list of water quality monitoring to understand effects of stream crossings. The submitted Sediment and Erosion Control Plan details the proposed monitoring for stream crossings. Can the Proponent comment whether the EIRB commitment #231 is included in its entirety within the Sediment and Erosion Control Plan?

Doug Chipertzak: We do not include pH and dissolved oxygen. I am willing to discuss this further with regulators. Our focus is on turbidity and total suspended solids.

Jamie VanGulck: The proposed undertaking has a variety of activities that may result in the discharge of waste onto waters. The *NWTWA* provides a detailed definition of the term waste and in general, includes “any substance that, if added to water, would degrade or alter or form part of the process of

degradation or alteration of quality of the water...". Select activities that may result in the release waste to waters may include, but not limited to, run-off water used during road construction, run-off and contact water from borrow pits.

Proponent and Reviewers, to aid in satisfying Section 14(4) of the *NWTWA*, what water quality criteria are recommended for the discharge of waste from the proposed undertaking?

Doug Chipertzak: The water criteria that we are using are basically been turbidity and total suspended solids. During break up and the freshette the watercourses may exceed CCMA guidelines for aquatic health, at that time we will be looking at changes in the values upstream and downstream. We want to minimize any erosion from the crossing itself.

Ron Wallace: Any follow up from anyone?

Paul Green: For reference, the Highway 3 re-alignment had incorporated a surveillance network program, a water monitoring program. I recognize the environment in this area is somewhat different than yours. Shall I read out that list?

Ron Wallace: I would like the list to go on record now. The Water Board is keenly aware of the provisions for that licence and we appreciate your re-iteration for our interest:

Paul Green: "Some of the water sampling requirements were to sample on a monthly frequency: routines: pH, conductivity, magnesium, hardness, nutrients which includes TSS and ammonia, total arsenic, basic metal scan, total metal scan, mercury, oil and grease. Sampling on the completed highway shall take place in the spring and fall over a three year period to monitor post construction activities. Samples shall be analysed for the following parameters: routines: pH, conductivity, magnesium, hardness, nutrients which includes TSS and ammonia, total arsenic, basic metal scan, total metal scan, mercury, oil and grease. More frequent samples may be required at the request of an inspector."

There may be other parameters that would be applicable in your area.

Doug Chipertzak: That list seems excessive for a typical road. Perhaps Giant Mine plays a role in that?

Paul Green: For your information, the realignment is nowhere near the Giant Mine site.

Jamie VanGulck: In response to NWTWB IR #18, the Proponent submitted a Waste Management Plan. The Waste Management Plan provided on September 5, 2013 does not provide the facilities that will accept hazardous waste or each type of recyclables. When will the final Waste Management Plan that includes this information be submitted by Proponent to the NWTWB?

Jim Stevens: It will be provided on September 20th.

Jamie VanGulck: In response to NWTWB IR #19, the Proponent submitted an Explosives Management Plan. Within Section 3 of the Explosives Management Plan there is discussion on ANFO and mechanisms of how it can be released into the surrounding environment; however, there is no Water Quality Monitoring Program presented within the plan. Section 3.2 of the Explosives Management Plan

references a monitoring program that is integrated with baseline water quality information to be a component of the mitigation strategy for nitrate loss to the environment. Is this monitoring program developed and where is it reported if it is completed?

Doug Chipertzak: The monitoring program is in the Fish and Fish Habitat Protection Plan and is referenced in the Pit Development Plan. It should also be identified in the Explosives Management Plan.

Jamie VanGulck: Section 3.2 of the Explosives Management Plan references a spill handling procedure as a means to mitigate potential impacts to the environment. A limited connection to the Spill Contingency Plan is provided in the Explosives Management Plan. Further the Spill Contingency Plan does not address ANFO and associated chemicals. What is the Proponent's position regarding the inclusion of ANFO products in the Spill Contingency Plan?

Jim Stevens: That has been added to the Spill Contingency Plan.

Jamie VanGulck: In response to NWTWB IR #21, the Proponent submitted a Spill Contingency Management Plan (SCMP). Further, the Proponent's response states that procedures for greywater and sewage spill response are included in the SCMP however the SCMP does not appear to include this information. Does the Spill Contingency Plan address potential spills from sewage and greywater?

Jim Stevens: It has been added to the Spill Contingency Plan

Jamie VanGulck: When will a final Spill Contingency Management Plan be submitted to the NWTWB?

Jim Stevens: September 20, 2013

Ron Wallace: Any further questions?

Jim Stevens: May I get clarification from the participants on PHC#9. What was asked for in terms of our monitoring of the permafrost?

Robyn McGregor: I understood the question to be how and when the monitoring will be written down.

Jamie VanGulck: We would be interested in understanding the permafrost monitoring. Where is the monitoring plan for this recorded? We hope it will be made clear to us.

Ron Wallace: *The group was given the option of carrying on or taking a break.* (The decision was made to carry on). Are there any other questions? Hearing none the Technical Session is now closed.

Ron Wallace: I now turn the meeting over to the NWTWB legal counsel Mr. Gerry Phillips.

Gerry Phillips: Gerry explained that the next step will be a public hearing and that the Proponents would need to prepare a presentation that may include expert witnesses. How much time will the Proponent need?

Jim Stevens: Based on what we know we will need about two hours and would likely have one expert witness. The expert will likely discuss permafrost and related slumping.

Gerry Phillips: Is the Proponent intending to supplement the meeting with written information? When would the material be ready?

Jim Stevens: Yes we intend to do so. We will likely have those ready for September 27th.

Gerry Phillips: Do you have a list of witnesses that you might want to call to the Hearing? This is so other entities can be properly prepared. We don't want any surprises at the hearing. The Pre-Hearing Conference is designed to facilitate the public hearing. I want it to be clear to the Proponent that nothing has been decided here. There will be much of the same kind of questions at the public meeting. The hearing on October 7th in Inuvik will be technical in nature and the hearing on October 8th in Tuktoyaktuk will be a community hearing. Cross examination will happen. The community meeting will be in Tuktoyaktuk will include questions from the public. The Proponent goes first at the hearing. Other parties must have their documents in by the 27th. Rules 79 and 85 govern participation at the hearing.

Jana Shoemaker: GNWT-J/DOT: Will the Proponent be allowed to cross examine the other parties at the hearings?

Gerry Phillips: Yes, absolutely.

Jana Shoemaker: Is it acceptable to have the Minister there?

Gerry Phillips: Yes.

Jim Stevens and Mike Harlow mentioned that the EIRB hearings were similar in kind to these hearings.

Billy Archie: Rule 36 mentions traditional knowledge. Will there be a chance for elders to be heard? The elders have seen the most change and understand the implications.

Gerry Phillips: The Board can make appropriate arrangements for elders.

Billy Archie: I'll ask around in the community to find somebody to come to the hearing.

Ron Wallace: Any other questions or comments? (No comments heard). This Pre-Hearing Conference, required to fulfill the intent of Water Board Rules and Procedures Rule 81, is now closed.

is now closed as it Pre-Hearing Conference meeting adjourned 5:25pm.

Inuvik-Tuktoyaktuk Highway Project ITH (N7-1-1835)

Pre-Hearing Conference

September 16, 2013, Inuvik, NT

	Participant	Department	Confirmed Attendance	In Person	By Phone	Comments
1	Billy Archie, Chairperson	Aklavik C.C.	Yes	Yes		
2	Mike Harlow	ILA	Yes	Yes		
3	Conrad Baetz	AANDC-NMDO	Yes	Yes		
4	Jan Davies	AANDC-NMDO	Yes	Yes		
5	Paul Green	AANDC-WRD	Yes		Yes	
6	Robert Jenkins	AANDC-WRD	Yes		Yes	
7	Jan Arsenault	AANDC/WRD	Yes		Yes	
8	Meighan Andrews	TC	Yes		Yes	
9	Veronique D'Amours-Gauthier	DFO	Yes		Yes	
10	Kelly Eggers	DFO	Yes		Yes	
11	Manik Duggar	CanNor	Yes		Yes	
12	Marie Adams	CanNor	Yes		Yes	
13	Steven Charlie	GNWT-ENR	Yes	Yes		
14	Jim Stevens	DOT	Yes	Yes		
15	Pietro de Bastiani	DOT	Yes		Yes	
16	Jana Shoemaker	GNWT-J/DOT	Yes	Yes		
17	Gurdev Jagpal	DOT	Yes	Yes		
18	Ann Kulmatycki	DOT	Yes		Yes	
19	Larry Purcka	DOT	Yes		Yes	
20	Erica Bonhomme	Kavik Stantec/DOT	Yes	Yes		
21	Tara Schmidt	Kavik Stantec/DOT	Yes	Yes		
22	Doug Chipertzak	Kavik Stantec/DOT	Yes	Yes		
23	Walter Orr	Kavik Stantec/DOT	Yes	Yes		
24	Michael Fabijan	Kavik Stantec/DOT	Yes	Yes		
25	Robyn McGregor	Kiggiak EBA/DOT	Yes	Yes		
26	Doug Saunders	EGT NW/DOT	Yes	Yes		
27	Phoebe Miles	Infrastructure	Yes		Yes	
28	Adam Vivian	McLennan Ross LLP/WMAC/IGC	Yes		Yes	
29	Gerald Inglangasuk	ICC	Yes	Yes		
30	Bernice Joe	ICC	Yes	Yes		
31	Jamie VanGulck	NWTWB	Yes		Yes	
32	Jason Thorpe	NWTWB	Yes		Yes	
33	Gerry Phillips	NWTWB	Yes	Yes		
34	Ron Wallace	NWTWB	Yes	Yes		
35	Freda Wilson	NWTWB	Yes	Yes		
36	Marie-Anick Alie	NWTWB	Yes	Yes		
37	Liz Castaneda	NWTWB	Yes		Yes	
38	Transcriber	NWTWB	Yes		Yes	