

Richard Dwyer

From: Phyllis Beaulieu
Sent: Wednesday, April 27, 2011 12:12 PM
To: Richard Dwyer
Subject: FW: DFO comments to NIRB Part 4 screening of Mallery Lake Project

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For your file and action

From: Kivi, Lyndon [mailto:Lyndon.Kivi@dfo-mpo.gc.ca]
Sent: Monday, April 18, 2011 8:55 AM
To: Kofi Boa-Antwi
Cc: Ryan Barry; paula.smith@ec.gc.ca; licensing@nunavutwaterboard.org; landsmining@inac-ainc.gc.ca; Moggy, Derrick
Subject: RE: DFO comments to NIRB Part 4 screening of Mallery Lake Project

Thanks for the information and clarification Kofi,

Our mitigation measure for management of return water from drilling in the Operational Statement is that it be properly contained and not released into any waterbodies, I haven't gone outside of this in my advice.

The problem is the Operational Statement states "no drilling with saltwater in permafrost" which has been interpreted that calcium chloride cannot be added to the drilling water in a permafrost environment regardless of how the return water is managed. It may be referring to pumping from a marine environment, not sure, we need to determine what specifically that condition is addressing and change the wording to make it clearer in the next version of the Operational Statement.

Lyndon

Lyndon Kivi
Area Habitat Biologist
Eastern Arctic Area
Fisheries and Oceans Canada
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From: Kofi Boa-Antwi [mailto:kboa-antwi@nirb.ca]
Sent: Friday, April 15, 2011 2:33 PM
To: Kivi, Lyndon
Cc: Ryan Barry; paula.smith@ec.gc.ca; licensing@nunavutwaterboard.org; landsmining@inac-ainc.gc.ca
Subject: RE: DFO comments to NIRB Part 4 screening of Mallery Lake Project

Dear Lyndon Kivi,

In the past years, the NIRB has been making recommendations to proponents for exploration projects based on Environment Canada's (EC) standard comments for such projects:

The proponent should be aware that the *Canadian Environmental Protection Act* lists calcium chloride (CaCl) as a toxic substance. The proponent shall therefore ensure that if CaCl is used as a drill additive, all sumps containing CaCl are properly constructed and located in such a manner as to ensure that the contents will not enter any water body.

More recently (e.g. NIRB File: 11EN001) EC have changed to recommending this:

Environment Canada assessed inorganic chloride salts and concluded that these salts in high concentrations are harmful to the environment. As a result the Proponent should ensure that when using calcium chloride (CaCl₂) for drilling purposes that the return water is contained in a properly constructed sump and located in such a manner as to ensure that the contents do not migrate out of the sump. Please note that the proponent should not rely on permafrost integrity to contain and isolate drilling wastes.

If Fisheries and Oceans Canada (DFO) is advising a proponent that they can act outside of DFO's Operational Statement, then we would prefer this to be a formal comment submission to the NIRB. We also need clarification on this issue from DFO and EC for our standard terms and conditions.

Best regards,
Kofi

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From: Kivi, Lyndon [mailto:Lyndon.Kivi@dfo-mpo.gc.ca]
Sent: April-14-11 11:36 AM
To: Graham Gill
Cc: Jeff Mercer; Richard Dwyer; Kofi Boa-Antwi
Subject: RE: DFO comments to NIRB Part 4 screening of Mallery Lake Project

Hi Graham,

Sorry for the slow response, I'm trying to determine why that condition of no use of saltwater for drilling in permafrost is in the operational statement. I was in Iqaluit last week at the Nunavut Mining Symposium and talked to some people from the industry about the use of salt for drilling in permafrost and -as you mention below- I understand that it is essential to prevent freezing of water down the hole.

Calcium chloride is non-toxic and I see no issues with using it for your core drilling operations along with standard best management practices for disposal of drill cuttings etc. So please proceed with your drilling operations and exploration work once you have all of your permits.

I'll continue to look into the salt issue and let you know what comes of it. I appreciate your feedback because we will make changes to the Operational Statement to address issues such as this one as they come up.

It is not mandatory that you send in the Operational Statement Notification Form, we like to get them so we can monitor some of projects where they are used to see if they are being interpreted properly and if not, as mentioned, we can make changes to the Operational Statement.

Lyndon

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From: Graham Gill [mailto:G.Gill@diamondsnorth.com]
Sent: Monday, April 04, 2011 9:10 PM
To: Kivi, Lyndon
Cc: Jeff Mercer; Richard Dwyer; Kofi Boa-Antwi
Subject: RE: DFO comments to NIRB Part 4 screening of Mallery Lake Project

Hi Lyndon;

Thank you for the response regarding our application to conduct exploration work on our Mallery Lake project located west of Baker Lake in Nunavut.

I have reviewed the Mineral Exploration Activities, Operational Statement and am requesting some clarification to the statement outlined on page 2 that states "no drilling with saltwater in permafrost conditions will occur".

As you may know the use of calcium chloride (salt) has been used exclusively in drilling operations in cold climates (especially in areas of permafrost) to reduce the freezing point of water used in drilling operations both currently and in the past and is a standard practice in all drilling operations in the north. As mentioned, the use of calcium chloride reduces the freezing point of the water used in drilling operations and virtually reduces the probability of drill rods being frozen in the ground which would result in the loss of the drill hole and possibly many (100's) of metres of drill steel left in the ground with no possible way to retrieve said material. All other portions of the Operational Statement will be abided to as done in the past. The main issue is the use of salt.

In all previous water licence and land use applications the use of calcium chloride has never been an issue and the DFO Notification Form is also something I have never encountered before.

I am requesting clarification to the use of salt while drilling in permafrost conditions and whether the Notification Form is part of the NIRB/NWB requirements to obtaining a Land Use Permit and Water Licence within Nunavut.

Any response to these questions from all parties concerned (INAC, NWB, NIRB) would be most welcome.

Thanks.

Graham Gill
Consulting Geologist
URANIUM NORTH RESOURCES CORP.

From: Kivi, Lyndon [mailto:Lyndon.Kivi@dfo-mpo.gc.ca]
Sent: March-22-11 8:56 AM
To: Graham Gill
Subject: DFO comments to NIRB Part 4 screening of Mallery Lake Project

Hello Graham,

Attached are the DFO comments to NIRB for the Part 4 Screening of Uranium North Resources Corp's Mallery Lake Project.

Lyndon

<<NU-11-0004 DFO comments to NIRB Mallery LK Project Uranium North.pdf>>

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