Alan Ehrlich

From:

Jane Amphlett < Jane. Amphlett@aandc-aadnc.gc.ca>

Sent:

March-25-13 9:18 AM

To:

Alan Ehrlich

Cc:

Carol Luttmer

Subject:

Fwd: RE: IR Response on Water Treatment at Giant Mine

Follow Up Flag:

Follow up

Flag Status:

Flagged

The project also provided additional information to Todd Slack who was unable to attend our meeting with AN and the City.

Thanks

Jane

>>> Jane Amphlett 3/22/2013 3:59 PM >>> Hi Todd.

We did have a conference call on March 21, 2013 to review the Information Response on Giant Mine Water Disposal prepared by AECOM and Senes. Alternatives North and the City of Yellowknife participated on the call. In response to your email below we can provide the following information:

- 1. The intent of the project is to make the ice safe where the ice is used by the public. We believe that a near shore outfall will not impact the public's recreational activities or their use of the area. To meet the objectives listed in Section 4.2 we commit to working with the City of Yellowknife on the design and monitoring of the outfall and obtaining input from user groups such as the snowmobiling association. We are proposing to conduct a design workshop with all parties to:
 - Identify an outfall location
 - Develop a preliminary design concept that may include pre cooling of discharge water and installation of a
 physical breakwater structure that identifies safe ice conditions
 - Develop a monitoring program that confirms safe ice thickness
 - Develop a communication plan.

This is our commitment to give the community the comfort that the operation of the water treatment plant outfall will be safe all year.

2. The Developer Assessment Report (DAR) suggested a target arsenic effluent criteria of 200 μg/L arsenic before entering the diffuser (end of pipe). A diffuser is required to mix the effluent discharge with water in the bay to meet the receiving water quality objective stated in the DAR at the edge of the near-field mixing zone.

An ion exchange filter removes more arsenic at the plant and does not require the rigorous mixing with water in the bay to meet receiving water quality objectives.

We have suggested that the discharge of treated effluent from the water treatment plant be discharged near shore. There will be an area near shore that will receive flowing discharge water from the end of the pipe that will likely create an area of thinner ice. Northwest Territory Power Corporation (NTPC) at Jackfish Lake is not the same situation at the Giant Mine as the NTPC discharges cooling water that is warm. The intent at Giant Mine is to consider a breakwater structure that is a permanent feature that forms part of the outfall structure design and cannot be readily accessed by the public. Monitoring of ice thickness beyond the breakwater would be conducted to identify when ice has reached a safe thickness of 0.15 m (6 inches). This monitoring was discussed on the call and the City was receptive to working with the project to develop a monitoring plan and potentially conduct ice thickness monitoring as done in other areas of the City by the fire department.

3. Yes. The Giant Mine Project would support a measure to meet drinking water quality of 10 μ g/L arsenic for discharge from the water treatment plant at the end of pipe.

Jane

>>> Todd Slack <tslack@ykdene.com> 3/19/2013 12:05 PM >>>

Hi Jane/DK.

I can't be at the Thursday mtg, but I'm fine with getting some info back before writing anything...Leadership is out of the office for a bit, but I'll bring this up when I can. I only have time for a quick read through this morning, but initial thoughts:

- 1) AECOM report Section 4.6 doesn't provide any comfort that the objective listed in 4.2 will be met that the ice will be safe. My particular issue is that we've been discussing this for some time, that there was sampling work planning (which we learned was actually not for ice safety, but confirmation of dilution), but it's still in the wind in terms of results.
 - a. The result I'm looking for is for the project to stand up and say that the ice will be safe that users will not notice a difference, as well as a response cycle where user concerns can come forward.
- 2) Water Quality I obviously haven't talked to the chief, but the improvement in water discharge is likely to be well received. However, I need some engineer talk to understand why a diffuser is needed for the DAR option and not for lex?
 - a. And if I understand your letter, the actual proposal would be to discharge near shore, accepting and identify a dangerous area, similar to what NTPC does?

I'm tempted to understand why this only comes around at this point, not in response to any of the other concerns, IRs, or other processes, but I'm thinking to let sleeping dogs lie.

3) At this point, would the project support a measure from the Board that required the project to meet drinking water quality at end of pipe?

Cheers,

From: Jane Amphlett [mailto:Jane.Amphlett@aandc-aadnc.gc.ca]

Sent: March-18-13 11:35 AM

To: kor@theedge.ca

Cc: dkefalas@yellowknife.ca; Todd Slack

Subject: Re: IR Response on Water Treatment at Giant Mine

Hi Kevin, we are just confirming with the consultants but Thursday morning should work for us. I will send out a scheduler to confirm a time.

Thanks Jane

>>> kevin o'reilly <<u>kor@theedge.ca</u>> 3/18/2013 12:54:14 PM >>>

Sorry, I forgot to copy the City and YKDFN...

---- Original Message -----

From: kevin o'reilly <<u>kor@theedge.ca</u>> Date: Monday, March 18, 2013 10:53

Subject: Re: IR Response on Water Treatment at Giant Mine To: Jane Amphlett Jane.Amphlett@aandc-aadnc.gc.ca

Jane

I reviewed the IR response over the weekend and have a number of technical questions. I have also contacted the City and left a message for Todd Slack. Alternatives North and the City would like to meet with AANDC/GNWT staff and AECOM to discuss the IR response. We have Thursday morning available if you can set up something. Thanks.

Kevin O'Reilly Alternatives North

---- Original Message -----

From: Jane Amphlett < Jane. Amphlett@aandc-aadnc.gc.ca>

Date: Friday, March 15, 2013 13:50

Subject: RE: Extension on due date for IR round four on the Giant Mine Remediation Project

To: Morag McPherson < Morag.McPherson@DFO-MPO.GC.CA >, "'amy.sparks@ec.gc.ca'"

<amy.sparks@ec.gc.ca>, "'enviromgr@nsma.net'" <enviromgr@nsma.net>, "'reganalyst@nsma.net'"

<reganalyst@nsma.net>, "'vchristensen@reveiwboard.ca'" <vchristensen@reveiwboard.ca>,

"'aehrlich@reviewboard.ca'" <aehrlich@reviewboard.ca>, 'kevin o'reilly' <kor@theedge.ca>,

"'dkefalas@yellowknife.ca'" <dkefalas@yellowknife.ca>, "'tslack@ykdene.com'" <tslack@ykdene.com>

Cc: Michael Nahir < Michael. Nahir@aadnc-aandc.gc.ca >, Adrian Paradis < Adrian. Paradis@aandc-

aadnc.gc.ca>, Mark Palmer < Mark.Palmer@pwgsc-tpsgc.gc.ca>

Please find attached the IR response and supporting information. I will drop off a CD and hardcopy of the two requested reports to the MVEIRB office today and as indicated by Mark if anyone would like access prior to their availability on the registry let me know.

Regards Jane

>>> Mark Palmer <<u>Mark.Palmer@pwgsc-tpsgc.gc.ca</u>> 3/15/2013 8:24 AM >>>

Hi, Jane Amphlett will be putting the package together today and sending to the MVIRB in the afternoon. We will CC all the parties with the responses and backup document for questions 1 and 2. The 2 reports that were requested under question 3 are to big to email. If anyone would like copies of those documents today, Jane could either burn a CD or put them on a data stick.

Please get in contact with Jane if you would like copies of the 2 larger reports today and make arrangements to either stop by the office (or at an agreed location) to pickup CD or have the info put on a data stick.

Have a great weekend.

Mark

From: kevin o'reilly [mailto:kor@theedge.ca]
Sent: Thursday, March 14, 2013 4:38 PM

To: Mark Palmer

Cc: 'vchristensen@reveiwboard.ca'; 'Morag.McPherson@dfo-mpo.gc.ca'; 'amy.sparks@ec.gc.ca';

'tslack@ykdene.com'; 'dkefalas@yellowknife.ca'; 'enviromgr@nsma.net'; 'reganalyst@nsma.net'; AdrianParadis;

MichaelNahir; 'aehrlich@reviewboard.ca'

Subject: Re: Extension on due date for IR round four on the Giant Mine Remediation Project

Importance: High

Mark

When AANDC files its response to the IR tomorrow, it would be very helpful if it could be copied to the parties including Alternatives North. I ask this as I am away for part of next week and would like to start our reply this weekend. Thank you.

Kevin O'Reilly Alternatives North

---- Original Message -----

From: Mark Palmer < Mark.Palmer@pwgsc-tpsgc.gc.ca>

Date: Wednesday, March 6, 2013 16:54

Subject: Extension on due date for IR round four on the Giant Mine Remediation Project

To: "'vchristensen@reveiwboard.ca'" < vchristensen@reveiwboard.ca >

Cc: "'Morag.McPherson@dfo-mpo.gc.ca'" < Morag.McPherson@dfo-mpo.gc.ca'>, "'kor@theedge.ca'"

< her@theedge.ca>, "'amy.sparks@ec.gc.ca'" < her@theedge.ca>, "'tslack@ykdene.com'"

<tslack@ykdene.com>, "'dkefalas@yellowknife.ca'" <dkefalas@yellowknife.ca>,

"'enviromgr@nsma.net'" < <a href="mailto:enviromgr@nsma.net" reganalyst@nsma.net" < <a href="mailto:reganalyst@nsma.net" reganalyst@nsma.net" < <a href="mailto:reganalyst@nsma.net" reganalyst@nsma.net" reganalyst@nsma.net, Adrian Paradis Adrian.Paradis@aandc-aadnc.gc.ca, Michael Nahir < Michael.Nahir@aadnc-aadnc.gc.ca, Michael Nahir < <a href="mailto:

aandc.gc.ca>, "'aehrlich@reviewboard.ca'" <aehrlich@reviewboard.ca>

Please find an attached a letter requesting a one week extension on IR round four for the Giant Mine Remediation Project.

If you have any questions please call me at 867-446-3498.

Thanks

Mark Palmer

Senior Advisor, Giant Mine Remediation Project