

From: [Andrew Mitchell](#)
To: dts@nunavutwaterboard.org
Cc: [Phyllis Beaulieu](#); melissa.joy@inac-ainc.gc.ca
Subject: RE: Lupin discharge - status
Date: Tuesday, July 21, 2009 12:52:36 PM

Dave:

We have received preliminary water quality data and toxicity data from sampling conducted last week in Pond 2 and the water quality does not meet discharge criteria at the current time. The pH was between 5.27 and 5.4 and the preliminary lake trout and daphnia tests failed. We had the laboratory adjust the pH of the toxicity runs on water received at the lab and the pH adjusted test runs also failed. Some of the metals, principally zinc, cadmium and copper are above CCME guidelines, but below license discharge concentrations, which may be the source of the toxicity. I would not expect these concentrations to reduce in samples pH adjusted in the lab, but they would precipitate in the pond over time.

To adjust the pH and precipitate metals, we will need to add additional lime to Pond 2 prior to discharge. We have two Hercules loads of lime coming in to Lupin scheduled for the 27th and 28th of July totaling 36,000 kg. It will likely take 1-2 weeks to add enough lime to the pond to make a significant difference in the water quality, we will be testing the pH in the field as lime is added to the pond and will re-sample when an appropriate adjustment has been effected. We hope to commence discharge around the middle of August if the treatment is effective.

As we discussed last week, approximately 60 tonnes of lime was spread on the ice in April. Of that, 20 tonnes was delivered to the site in April, the remainder was taken from inventory. It is possible that this treatment did not have the desired effect due to the large volume of water in Pond 2 and the effects of humidity on the lime stored in the warehouse. We are currently taking steps to treat the water prior to discharge and will advise the Inspector and the Water Board as to the contemplated date of discharge a minimum of 10 days prior, as required in the regulations.

I trust this provides the update on the situation at Lupin you require. If you have any questions, please do not hesitate to call.

ANDREW MITCHELL, P.Geo.
DEVELOPMENT MANAGER - CANADIAN OPERATIONS

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From: David Hohnstein [<mailto:dts@nunavutwaterboard.org>]
Sent: Tuesday, July 21, 2009 1:46 PM
To: Andrew Mitchell

Subject: Lupin discharge - status

Good day Andrew,

Phyllis and I were talking and I thought I would send out a quick email to follow-up on our discussion last week and see how things were progressing at Lupin and whether discharge was on the agenda. You had briefly mentioned the discharge in a recent email so I had asked if she had received a notification under Part E, Item 4, which I realize is directed to the Inspector, but usually a copy is forwarded to the NWB and she indicated that there didn't appear to be anything on file.

Hope everything is going well,

Regards,

Dave

David Hohnstein, C.E.T.,
A/Director Technical Services

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