From: David Hohnstein [dts@nunavutwaterboard.org]

**Sent:** Friday, May 06, 2011 4:22 PM

**To:** Porter, Ida

**Cc:** k.kharatyan@nunavutwaterboard.org

**Subject:** FW: 2BE-CRA1015 EC review

## RECEIVED

By Licensing Administrative Assistant at 3:12 pm, May 05, 2011

lda.

See EC's response below, further to my inquiry on their review comments provided. Please include in our files.

Thanks, Dave

From: Wilson, Anne [Yel] [mailto:Anne.Wilson@EC.GC.CA]

Sent: Thursday, May 05, 2011 3:12 PM

To: <a href="mailto:dts@nunavutwaterboard.org">dts@nunavutwaterboard.org</a>

Cc: Smith, Paula [Iqa]; Dunn, Allison [Iqa]; Bujold, Ron [Yel]

Subject: RE: 2BE-CRA1015 EC review

Hi Dave,

I haven't reviewed the amendment application, but EC strongly discourages using chlorine for disinfection of any wastewater being discharged to the receiving environment. Beyond the toxicity of the free chlorine residuals, there is the issue of formation of chloramine compounds, which are CEPA toxics. Dechlorination would not necessarily remove these compounds.

Is the first small water body frequented by fish?

From: Smith, Paula [Iga]

**Sent:** Wednesday, May 04, 2011 10:45 AM **To:** Dunn, Allison [Iqa]; Wilson, Anne [Yel]

Cc: Bujold, Ron [Yel]

Subject: FW: 2BE-CRA1015 EC review

Hi all.

Dave from the NWB has a couple of questions for us, as below. They are water quality questions – do we have advice regarding the use of chlorine in these systems and if we have concerns about the effluent limits.

Feel free to respond directly to Dave if you'd like.

Thanks, Paula

Paula C. Smith

Telephone | Téléphone 867-975-4631

From: David Hohnstein [mailto:dts@nunavutwaterboard.org]

Sent: Wednesday, May 04, 2011 12:34 PM

To: Smith, Paula [Iqa]

Cc: k.kharatyan@nunavutwaterboard.org Subject: 2BE-CRA1015 EC review

Hi Paula,

I was just wondering if EC might have any further comment on the above noted application for amendment (comments attached). I am finalizing a review of the file by Karen and was interested in EC's position on using chlorine for disinfection at the proposed wastewater treatment system for the Hayes Camp. The licensee has

indicated that the system would be using sodium hypochlorite for disinfection of the water, however the system specs/manual indicates that it would be used for cleaning/rinsing of the system. Pending clarification from North Country Gold, it appears as though it would be used in any case. As far as I know the NWB does not have any parameters for Chlorine residuals in licences, nor is it used. As most systems release the effluent in areas that are not public assessable, it has not been an issue (if this system uses the UV treatment indicated in the product info, it would likely eliminate the issue above). There is also no mention of chlorine removal following disinfection (clean/rinse procedures).

The other concern I had was the effluent limits to be imposed, given that the effluent would be discharged to a fairly small water body, and then to a larger lake to the west of camp. No comments were received with respect to the location or method of discharge, which would be quite low given the size of camp (ie less than the 50m3/day they are requesting for water use).

Any thoughts? I'd like to wrap this up asap as the Company is starting to mobilize and get ready for their spring drilling and camp construction.

Regards,

Dave



Please consider the environment before printing this e-mail

David Hohnstein, C.E.T.

Director Technical Services



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