Richard Dwyer

From: Melissa Joy [Melissa.Joy@inac-ainc.gc.ca]
Sent: Thursday, June 24, 2010 2:28 PM
To: Richard Dwyer
Subject: RE: Permission to discharge water into Environment

Follow Up Flag: Follow up
Flag Status: Flagged

of course -it's Iqaluit. According to Nunatta they have their own water licence for their activities in Iqaluit (North 40). I have asked them to provide me with their water licence number (as I'm not familiar with their file) and they have not emailed me back yet. I will send it to you once I find out.

Melissa

>>> "Richard Dwyer" <licensingadmin@nunavutwaterboard.org> 24/06/2010
>>> 3:57 pm >>>
Hi Melissa;

For filing purposes could I get the municipality location of this discharge request?

Thanks,

-----Original Message-----
From: Melissa Joy [mailto:Melissa.Joy@inac-ainc.gc.ca]
Sent: Thursday, June 24, 2010 12:07 PM
To: Nunatta Enviromental Services
Cc: Andrew Keim; Ian Parsons; Lou-Ann Cornacchio; Peter Kusugak; Phyllis Beaulieu
Subject: Re: Permission to discharge water into Environment

Hi Jason,
I have received your email -we will review the results and get back to you tomorrow. Does Nunatta have their own water licence for this activity? or are they operating under the municipal water licence? Please confirm.

Thx
Melissa

Melissa Joy
Water Resource Officer
Indian & Northern Affairs Canada
PO Box 100, Iqaluit, NU, X0A 0H0
PH: (867) 975-4548 **NEW
FAX: (867) 979-6445
email: melissa.joy@inac.gc.ca

Office location has changed as of Dec 14/09 *please update your address book*

>>> Nunatta Enviromental Services <nunatta@northwestel.net> 24/06/2010
>>> 1:46
pm >>>
In one of our cells we have 145,000 gallons of water with sheen in it (Cell 4). Sheen will not likely cause any permanent habitat loss due to the amount of oil in it which is less than one micron (ppm). The sheen in this case (Refined products such as diesel), came from sites we have worked on and collected over a period of time into our cell 4, with the contribution of rain and melt water you can imagine the scale.

As you are aware sheen will evaporate gradually which is a major source of loss of oil volume to the atmosphere. The greater area to volume ratio of sheen increases the rate of evaporation, which primarily affects the lighter ends of the oil (diesel). After a short time, there will be fewer light ends in the sheen. Diesel and Gasoline have a limited number of fractions and will evaporate completely with little or no residue.

With the help of carbon vessels I will eliminate any threat of contaminents during discharging into the environment. Here is my formula:

For 145,000 gallons of water with 99.1 ug/l of Toluene and 0.8 ug/l of Xylene I will use 675kg of granular activated carbon (GAC) with a pump rate of 10 gallons/minute Where the threshold will be every 48 hours (15,552 gallons) adding new GAC

I've tried this within our own facility using a temporary berm. Samples were collected and sent to Paracel Labs in Ottawa for chemical analysis.
The results are included, where Cell 4 represents the 145, 000 gallons of water and Post WTR Cell 4 (48) represents the water collected that was passed through the GAC vessel after a 48 hour period.

As you will see the activated carbon did in fact eliminate any potential threat once passed through the vessel.

I would like to have your approval to discharge this water into the environment where it would not leach into aqautic marine life and would be placed in a industrial area, where if it does reach the water table, according to the results I've sent you, would be safe. If you can aknowledge this it would be much appreciated.

Thank you

Jason Taylor
Environmental Technician

Nunatta Environmental Services.