

June 30, 2009

Technical Advisor – Mining  
Nunavut Water Board  
P.O. Box 119  
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**Re: May 2009 –Monthly Monitoring Report for Water License 2AM-DOH0713**

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Following is the monthly report for May 2009 as required under Doris Water License No/Type 2AM-DOH0713 Type “A”. The license was issued on September 19, 2007 and will expire on September 30, 2013. The water license is specific for Mining and Milling and associated uses. The quantity of water usages shall not exceed 480,000 cubic meters annually.

This monthly report provides information on Part E (Conditions applying to Water Use) Item 1, Part G (Conditions applying to Waste Management and Waste Management Plans) Item 3, and Part H (Conditions applying to modifications).

Other conditions stipulated in license refer specially to mining and milling processes. These facilities have not been constructed at this time, due to the deferral of the Doris North Project by Hope Bay Mining Ltd. (HBML) and therefore, no monitoring has taken place to comply with conditions. The Nunavut Water Board (NWB) was notified of this deferral on September 11, 2008 and is after ongoing discussions, at this time considering a letter from HBML dated April 21, 2009 outlining the clauses that can not be complied with due to the deferral of the Doris North Project.

**1. Part E: Item 1.**

**a. DORIS CAMP WATER USAGE – SNP STATION ST-7**

During the month of May 2009, Doris Camp was in operation for the entire month. Potable water for domestic camp use was trucked to Doris Camp holding tanks from Windy Lake from May 1 to May 30, 2009 due to prior water quality (algae bloom) issues in Doris Lake. Water volumes extracted from Windy Lake for domestic use at Doris Camp have been reported against the Hope Bay Water Licence in accordance with the May 4, 2009 Amendment 2 of the 2BE-HOP0712 licence. Use of Windy Water was allowed prior to the amendment by the NWB because of the public health issues involved and was subsequently formalized by Amendment 2. Water extraction from Doris Lake resumed June 1, 2009. Metered consumption will be reported under this licence in the June monthly report.

**b. WATER SAMPLING MONITORING PROGRAM**

Monthly compliance samples were not taken from station ST-7 as the water at this station is not representative of “*freshwater pumped from Doris Lake*” as stipulated in the 2AM-DOH0713 water licence. The water in the domestic system at this location is from Windy Lake. The sampling for ST-7 will recommence in June when the water system modifications are complete and a new ST-7 station can be identified as the “*discharge end of the freshwater pump*”.

Results of the technical review in April by INAC to the NWB with regards to the Doris Camp planned water system modifications included recommendations for monthly reporting of sample analysis of the blue-green

algae in the raw water from Doris Lake. The species of blue-green algae identified in January 2009, was *Oscillatoria*, a known microcystin toxin producer. Algae samples will be taken once usage of Doris Lake water resumes through the new water system infrastructure. Winter baseline environmental studies also include sampling for further taxonomic analysis of algae species in the lake.

During the month of May 2009, water samples were collected once at monitoring station ST-8. SNP monitoring station ST-9 was not sampled as HBML is still working with INAC to agree on the appropriate alternative location as the current location does not hydrologically connect with ST-8. A survey of the area revealed very limited drainage pathways to collect sufficient effluent samples to comply with requirements stipulated under Part G: Item 3. This will need to be resolved with the INAC inspector in order to monitor compliance with the licence.

Sampling point ST-8 is located within the Doris Camp Sewage Treatment Plant, which is located directly east of the main building complex. Effluent samples were collected from a tap on the discharge line to the tundra at a location installed after the addition of a UV disinfection system (ST-8A). Results of sampling for May are in Table 2.

## Results

All data reported for May at SNP ST-8A is within the regulatory compliance values for all parameters. Table 1 provides sampling data as per Water Use Permit 2AM-DOH0713.

Table 1: Water Quality Data Summary for Monitoring Station ST-8, May 2009

Parameter/SNP Sites	ST-8A	ST-9 <sup>1</sup>	Doris: 2AM-DOH0713
ALS Lab Reference #	L759097-1, -2, -3, -4		Maximum Average Concentration (mg/L)
Field Sample Details	ST-8A	ST-9	Part G: Item 3
Sample Date/Time	May 4, 2009	-	(b)
BOD <sub>5</sub>	2.8	-	80 mg/L
TSS (mg/L)	<3.0	-	100 mg/L
Fecal Coliform	<1	-	10,000 CFU/100mL
pH (pH unit)	7.65	-	Between 6-9
Oil & Grease (Visibility)	nvs	-	NVS
Oil & Grease (mg/L)	<1	-	5

## 2. Part G: Conditions applying to Waste Management and Waste Management Plans (Item 3b)

### a. Part G: Item 3e (Treated Sewage Effluent Release in cubic meters)

Table 2 shows cumulative treated effluent released from the Doris Membrane Plant at SNP ST-8.

Table 2: Treated Sewage Effluent release in cubic meters (m<sup>3</sup>) through Doris Membrane Plant (ST-8), May 2009

Parameters	Doris Membrane Plant ST-8
Water Source	Windy Lake
Annual Cumulative	2394 m <sup>3</sup>
Monthly Cumulative	538 m <sup>3</sup>
Volume Average (Daily)	17 m <sup>3</sup>
Median	18 m <sup>3</sup>
Maximum	22 m <sup>3</sup>
Minimum	14 m <sup>3</sup>

During the month of May, sludge was pressed 10 times from the membrane plant resulting in the removal of approx. 1.13 m<sup>3</sup> of sludge from the plant. Sludge pressed was sent for incineration.

<sup>1</sup> Sampling was not done due to misunderstanding of the exact location for drainage before entry into Glenn Lake. No suitable sampling site could be found.

### **3. Environmental Incident Reporting**

A total of 5 environmental incidents were reported during the month of May. A summary of these incidents is provided below:

1. May 26, 2009 – Level 1 (Insignificant). A dead red fox was spotted between the oil cubes stacked on top of each other at the Roberts Bay 5 million L tank berm. The local Conservation Office was notified and instructed HBML to dispose of the carcass. The carcass was sent to Cambridge Bay landfill.
2. May 27, 2009 – Level 2 (Minor). Food garbage was found in the wooden shack beside the Robert's Bay incinerator. The garbage was removed for incineration and the shack was removed to prevent garbage storage. Site personnel and contractors are required to request garbage pick-up for immediate incineration.
3. May 27, 2009 – Level 2 (Minor) An operator moving snow to expose barrels at Robert's Bay old laydown, clipped the bottom of a barrel that contained waste oil. A spill of approximately 5-20 litres leaked on to the ground. The contaminated sand and soil were picked up and stored in a barrel for removal and disposal.
4. May 27, 2009 – Level 3 (Moderate) Area surrounding the explosives storage at Roberts Bay old laydown was disturbed by heavy machinery working on unfrozen/lightly frozen ground in the area. Work was stopped immediately and the area will be monitored for erosion and run-off.
5. May 30, 2009 – Level 1 (Insignificant). An unused tank was brought over from Boston and laid in the Robert's Bay laydown for shipment on the barge. The tank leaked a litre or two of oil on the ground. Absorbent (corn cob) was placed on dripped oil. The tank was removed from the area and placed in the 5 million L Tank Farm on a drip tray. The tank was positioned in a way that it would not continue to leak until it can be disposed of.

Should there be any questions regarding the monthly report for May 2009, please contact Chris Hanks, Director, Environment and Social Responsibility, Hope Bay Mining Limited on phone number: 1-720-917-4489 or email: [Chris.Hanks@Newmont.com](mailto:Chris.Hanks@Newmont.com)

Yours sincerely,

**Chris Hanks**

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