

November 30, 2011

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Re: October 2011 – Monthly Monitoring Report for Water Licence 2AM-DOH0713

Following is the monthly report for October 2011 as required under the Doris North Type A Water Licence No. 2AM-DOH0713. The licence was issued on September 19, 2007 and will expire on September 30, 2013. The water licence is specific to Mining and Milling and associated uses and water usage shall not exceed 480,000 cubic meters (m³) annually.

This monthly report provides information on:

- Part D (Conditions Applying to Construction) Item 19;
- Part E (Conditions applying to Water Use) Item 1;
- Part G (Conditions Applying to Waste Management and Waste Management Plans) Item 3 and 22 (e);
- Part H (Conditions Applying to Modifications); and
- Part J (Conditions Applying to General and Aquatic Effects Monitoring) Items 12 and 14

The report also contains the relevant monitoring requirements as set out in Schedule J of the licence, plus additional requirements from INAC.

Other conditions stipulated in the licence refer specifically to mining and milling processes for which the facilities have not yet been constructed. As these facilities are constructed and activities commence, the required monitoring programs will be implemented and reported on.

1. Part D: Conditions Applying to Construction

a. Item 7. Construction Monitoring

Construction monitoring is being undertaken and documented. A summary of this monitoring will be submitted with the annual Construction Monitoring report.

b. Item 19. Surface Runoff Effluent Quality Limits

Surface runoff from construction was sampled by SRK as part of the Waste Rock and Ore, and Quarry Monitoring Management Plans. Results will be included in the annual report.

2. Part E: Item 1. Conditions Applying to Water Use

a. Water Usage

Water was used for domestic camp use, underground mining and drilling, portable wash cars, construction, and surface drilling. Total water usage is reported in Table 1.

Table 1: Water Usage for Doris North (m³), October 2011

Parameters	Water Use
Water Source	Doris Lake
Geographical Coordinates	On file
Monthly Cumulative	1,218m ³
Annual Cumulative	27,438m ³
2AM-DOH0713 Permitted Water Volume (Total Annual)	480,000m ³

b. Water Quality Monitoring: Schedule J and Special Requirements

Monthly compliance samples, in accordance with Schedule J requirements of the licence, were taken from monitoring station ST-7 on October 02, 2011. October monitoring results are provided in Table 2.

Table 2. Monthly Compliance Sample Results for SNP Monitoring Station ST-7 in mg/L, October 2011

Parameter/SNP Sites	ST-7 (mg/L)
ALS Lab Reference #	L1067204-2
Sample Date/Time	Oct 02/11 @ 16:10
BOD	<2.0
Total Cyanide	-
Free Cyanide	<0.0050
Fecal Coliforms	<1 CFU/100mL
Total Oil and Grease	1.0
pH	7.68 (units)
TSS	8.0
Ammonia-N	<0.050
Nitrate-N	<0.050
Nitrite-N	<0.050
Orthophosphate-P	<0.010
Total Phosphate (as Tot P)	<0.020
Total Aluminum	0.061
Total Arsenic	<0.00040
Total Cadmium	<0.000050
Total Copper	0.0018
Total Chromium	<0.0050
Total Iron	0.097
Total Mercury	<0.00010
Total Molybdenum	<0.0050
Total Nickel	<0.0020
Total Lead	<0.00010
Total Selenium	<0.00040
Total Silver	<0.00010
Total Thallium	<0.00010
Total Zinc	<0.0040
Additional Parameters	
ALS Lab Reference #	L1070830-1
Sample Date/Time	Oct 10/11 @ 19:00
Blue-green Algae	116,000 cells/mL

3. Part G: Item 3(b) Conditions Applying to Waste Management and Waste Management Plans.

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 two separate taps, ST-8A and ST-8B (formerly ST-8#1 and ST-8#2 respectively), located on the discharge lines after the UV disinfection system from the tandem sewage treatment plants. The effluent at both stations was in compliance for all parameters (Table 3). A notification to move the ST-8 discharge location was provided to the NWB on June 19, 2011 and the new discharge location is now in use. Data from sampling at ST-8 is reported in Table 3.

Table 3: Water Quality Data Summary for Monitoring Station ST-8A and ST-8B, October 2011

Parameter/SNP Sites	ST-8A	ST-8B	Doris: 2AM-DOH0713 (Part G: Item 3 (b))	
ALS Lab Reference #	L1067204-3	L1067204-4	Maximum Average Concentration	Maximum Allowable Grab Sample Concentration
Sample Date/Time	Oct 02/11 @ 16:30	Oct 02/11 @ 16:25		
BOD ₅	2.6	2.9	80 mg/L	80 mg/L
TSS (mg/L)	<3.0	<3.0	100 mg/L	100 mg/L
Fecal Coliform	<1	<1	10,000 CFU/100mL	10,000 CFU/100mL
pH (pH unit)	6.56	6.63	6-9	9
Oil & Grease (Visible Sheen)	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Oil & Grease (mg/L)	2.8	3.5	5	10

Station ST-9 was not sampled during the month of October as the sampling station has frozen. HBML anticipates that ST-9 will not need to be relocated as a result of the relocation of the ST-8 tundra discharge point.

4. Part G: Items 21 (a) and 22 (e) Conditions Applying to Waste Management and Waste Management Plans.

During the month of October, water was not discharged from monitoring station ST-1 (Sedimentation Pond), ST-5 (Doris Bulk Fuel Storage Facility), ST-6a (Roberts Bay 5M Litre Fuel Storage Facility), or ST-6b (Roberts Bay Bulk Fuel Storage Facility). Water from ST-5, ST-6a and ST-6b were evacuated prior to freeze-up. All water from ST-1 was returned to the temporary pollution pond because it did not meet discharge criteria.

5. 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 5 shows the volume of treated effluent released from the Doris Membrane Plant at ST-8 and the volume of sludge removed and incinerated.

Table 5: Treated Sewage Effluent released in cubic meters (m³) through Doris Membrane Plant (ST-8) and total sludge volume removed, October 2011

Parameters	Effluent Released ST-8 (m ³)	Sludge Volume (m ³)
Annual Cumulative	8044	26.29
Monthly Cumulative	772	2.95

6. Tailing Impoundment Area Monitoring

- a. **Part G: Conditions applying to Waste Management and Waste Management Plans.**
 - Item 26: TL-4 discharge criteria
 - Item 27: TL-1 and TL-4 toxicity testing (as per Part J, Item 8)
 - Item 28: TL-3 water quality criteria
 - Item 30: TL-4 discharge volume allowance
- b. **Part J: Conditions Applying to General and Aquatics Effects Monitoring**
 - Item 2: TL-2 continuous flow monitoring
 - Item 8: TL-1 and TL-4 toxicity testing
- c. **Schedule J: SNP Monitoring parameters and frequencies**

The Tail Lake north dam was partially completed between January and April 2011. To reduce the water level of the lake, prior to turning the lake into the Tailings Impoundment area (TIA), HBML dewatered the lake between August and September 2011. Discharge rate was determined based on the licence requirements, and although there has not been any deposition of project-related water or tailing into Tail Lake, water sampling was completed following the licence requirements as closely as possible. Sample results and discharge volumes for water discharged from the TIA at monitoring stations TL-1, TL-2, TL-3, and TL-4 and TL-10 between July and September 2011 were compiled and will be provided in a separate document.

7. Part J: Conditions Applying to General and Aquatics Effects Monitoring

- a. **Part J: Item 12d Tonnages of Waste Rock Stored on the Temporary Waste Rock Pad**

Tonnages of waste rock material removed from underground and placed on the Temporary Waste Rock Pad to date are detailed in Table 6.

Table 6: Volume (metric tons) of waste rock stored on the Temporary Waste Rock Pad, October 2011

Parameters	Waste Rock on Pad (tonnes)
Waste Stockpile Mass as of Month Prior	145,922
Mass Added this Month	18,153
Mass Removed this Month	0
Total Tonnage	164,075

- a. **Part J: Item 12g Tail Lake Ice Thickness**

Ice formed on Tail Lake on October 08, 2011. The first measurement was taken October 20, 2011 and ice thickness of 0.20 m was recorded at 13W 434680E 7558875N.

- b. **Part J: Item 14 Thermal Monitoring Program**

Thermistor monitoring undertaken during the month of October is provided in Table 7. Only stations that were operational, and read by HBML staff, are reported. HBML is in the process of verifying which thermistors are working, and will be working with the geotechnical consultants to incorporate the thermistors that are being read by their staff. The complete list of active thermistors on the Hope Bay Belt will be reported in future SNP reports when the verification process is complete.

Table 7: Temperature Readings from Thermistor Monitoring, October 2011

Drill Hole Number/ Station	Thermistor String Serial Number	Location	Date of Reading	CHANNEL (Degrees Celsius)							
				1	2	3	4	5	6	7	8
SRK-14	690007	Tail Lake NW	Oct 12/11	-2.2	-3.6	-4.9	-8.4	-10.2	-10.6		
SRK-22	690003	Airstrip	Oct 06/11	-7.0	-3.8	-5.0	-6.5	-7.4	-7.6		
SRK-24	690001	Quarry 2	Oct 06/11	-0.9	-3.6	-5.2	-6.5	-7.1	-7.2		
SRK-32	690010	Tail Lake South	Oct 12/11	-2.5	-3.7	-8.9	-8.9	-10.1	-10.1		
SRK-38	TS0015	Tail Lake NW	Oct 12/11	-0.2	-4.0	-10.3	-10.3	-10.3	-9.9	-9.1	-9.1
SRK-39	TS0011	Tail Lake SW	Oct 12/11	-	-	-	-8.1	-	-	-	-
SRK-50	TS1618	Doris Lake NW	Oct 12/11	-1.3	-6.2	-8.6	-	-	-	-	-
SRK-53	TS1625	Tail Lake Shore W	Oct 12/11	-9.3	-2.9	-5.2	-7.7	-8.0	-8.0		
SRK-57	TS1623	Tail Lake Shore W	Oct 12/11	-2.3	-	-	-8.7	-9.4	-10.1		
SRK-58	TS1622	Tail Lake Shore E	Oct 12/11	-2.8	-7.7	-4.3	-8.7	-9.0	-		
SRK-JT1-09	TS2667	Roberts Bay Jetty	Oct 04/11	-0.2	-0.3	-0.2	0.8	0.5	-0.8	-2.7	-
SRK-JT2-09	TS2668	Roberts Bay Jetty	Oct 9/11	-3.0	0.4	0.6	0.1	-1.5	-3.8	-4.6	-4.8

8. Environmental Incident Reporting

There were five (5) environmental incidents in October:

- October 12, 2011: A 20 litre hydraulic oil spill occurred at the 5 million tank farm (within the lined berm area) from an unidentified source. The contaminated gravel was removed and brought to the on-site waste management facility pending proper disposal.
- October 18, 2011: A 4 litre motor oil spill occurred at the Doris Camp pad as a result of a leak in the base pan on a Genie lift. The contaminated soil was removed and brought to waste management. The leak was repaired on the Genie lift and it returned to service.
- October 20, 2011: A 50 litre spill of Jet fuel occurred at the Doris airstrip as a result of a frozen vent on an aircraft that was travelling to the airstrip apron. The contaminated material was removed and sent to waste management. The aircraft was inspected and returned to service.
- October 25, 2011: A 2 litre hydraulic oil spill occurred at the frozen core plant at Tail Lake as a result of a leaking hose on a Genie lift. The contaminated material was removed and brought to waste management. The hose was repaired and the unit put back into service.
- October 28, 2011: A 2 litre hydraulic oil spill occurred near the warehouse from an unknown source. The contaminated material was removed and brought to waste management for proper disposal.

Should there be any questions regarding the monthly report for October 2011, please contact Chris Hanks, VP Environmental Affairs for Hope Bay Mining Limited at (720)917-4489 or Chris.Hanks@Newmont.com.

Yours sincerely,

for

Chris Hanks

VP Environmental Affairs

Hope Bay Mining Limited