

September 6, 2011

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Re: July 2011 – Monthly Monitoring Report for Water License 2BB-BOS0712 under Part J – Items 2 – 8 and 11 – 14

Following is the monthly report for July 2011 as required under Water License 2BB-BOS0712. The license was issued on July 6, 2007 and will expire on July 31, 2012. The Advanced Exploration Mining and Milling – Type B licence indicates that the quantity of water usages shall not exceed 100 cubic metres (m³) daily, or 365,000 m³ annually.

This report contains the information required in Part J (Conditions Applying to the Monitoring Program) Items 2-8 and 11-14. Other conditions stipulated in the license refer specifically to mining and milling processes which are not applicable at this time.

Upgrades to the Boston Camp facilities are being completed in 2011. The upgrades include renovations to the existing Medic and the recreation facilities.

1. PART J: ITEM 2, 5, 6 AND 7

During July, water was not discharged from monitoring station BOS-2 (Containment Pond), BOS-5 (Fuel Containment Facility), or BOS-6 (Land farm Treatment Facility). Observed flow was sampled at monitoring station BOS-7 (Landfill Leachate), though the area adjacent to this point is not being used as or functioning as a landfill. Opportunistic seep samples were also collected from BOS-8 (Waste Rock and Ore Storage Pad). Results are presented in Tables 1 and 2.

Table 1: Sampling Results in mg/L for Monitoring Station BOS-7, July 2011

Parameters	Units	BOS-7
ALS Lab Reference #		L1026366-2
Sample Date/Time		03Jul11/2011 12:45
Alkalinity, Total (as CaCO ₃)	mg/L	6.9
Ammonia (as N)	mg/L	<0.050
Bicarbonate (HCO ₃)	mg/L	8.4
Carbonate (CO ₃)	mg/L	<5.0
Chloride (Cl)	mg/L	4.92
Conductivity (EC)	uS/cm	35.9
Hardness (as CaCO ₃)	mg/L	11.1
Hydroxide (OH)	mg/L	<5.0
Ion Balance	%	Low EC
Nitrate and Nitrite (as N)	mg/L	<0.071
Nitrate (as N)	mg/L	<0.050
Nitrite (as N)	mg/L	<0.050

Parameters	Units	BOS-7
ALS Lab Reference #		L1026366-2
Sample Date/Time		03Jul11/2011 12:45
Total Kjeldahl Nitrogen	mg/L	0.97
pH	pH	7.19
Phosphorus (P)-Total	mg/L	0.052
TDS (Calculated)	mg/L	16.3
Sulfate (SO4)	mg/L	1.26
Aluminum (Al)-Total	mg/L	0.281
Antimony (Sb)-Total	mg/L	<0.00010
Arsenic (As)-Total	mg/L	0.00219
Barium (Ba)-Total	mg/L	0.00737
Beryllium (Be)-Total	mg/L	<0.00050
Bismuth (Bi)-Total	mg/L	<0.000050
Boron (B)-Total	mg/L	0.0058
Cadmium (Cd)-Total	mg/L	0.000019
Calcium (Ca)-Total	mg/L	4.75
Chromium (Cr)-Total	mg/L	0.00083
Cobalt (Co)-Total	mg/L	0.00062
Copper (Cu)-Total	mg/L	0.00276
Iron (Fe)-Total	mg/L	0.568
Lead (Pb)-Total	mg/L	0.00146
Lithium (Li)-Total	mg/L	<0.0050
Magnesium (Mg)-Total	mg/L	1.58
Manganese (Mn)-Total	mg/L	0.0395
Molybdenum (Mo)-Total	mg/L	0.000064
Nickel (Ni)-Total	mg/L	0.00353
Phosphorus (P)-Total	mg/L	<0.30
Potassium (K)-Total	mg/L	0.568
Selenium (Se)-Total	mg/L	<0.00010
Silicon (Si)-Total	mg/L	0.711
Silver (Ag)-Total	mg/L	0.000076
Sodium (Na)-Total	mg/L	2.86
Strontium (Sr)-Total	mg/L	0.033
Thallium (Tl)-Total	mg/L	<0.000050
Tin (Sn)-Total	mg/L	<0.00010
Titanium (Ti)-Total	mg/L	0.0108
Uranium (U)-Total	mg/L	0.000047
Vanadium (V)-Total	mg/L	0.0008
Zinc (Zn)-Total	mg/L	0.0076
Calcium (Ca)-Dissolved	mg/L	2.61
Magnesium (Mg)-Dissolved	mg/L	1.11
Potassium (K)-Dissolved	mg/L	<0.50
Sodium (Na)-Dissolved	mg/L	2.3
Oil and Grease	mg/L	<1.0
Oil And Grease (Visible Sheen)		no visible sheen
Phenols (4AAP)	mg/L	0.0065
Benzene	mg/L	<0.00050
Ethylbenzene	mg/L	<0.00050
Toluene	mg/L	<0.00050
o-Xylene	mg/L	<0.00050
m+p-Xylene	mg/L	<0.00050
Xylenes	mg/L	<0.00071
F1(C6-C10)	mg/L	<0.10
F1-BTEX	mg/L	<0.10
F2 (>C10-C16)	mg/L	<0.25

Parameters	Units	BOS-7
ALS Lab Reference #		L1026366-2
Sample Date/Time		03Jul11/2011 12:45
F3 (C16-C34)	mg/L	<0.25
F4 (C34-C50)	mg/L	<0.25
Acenaphthene	mg/L	<0.000040
Acridine	mg/L	<0.000040
Anthracene	mg/L	<0.000040
Benzo(a)anthracene	mg/L	<0.000040
Benzo(a)pyrene	mg/L	<0.000010
Benzo(b&j)fluoranthene	mg/L	<0.000040
Benzo(g,h,i)perylene	mg/L	<0.000040
Benzo(k)fluoranthene	mg/L	<0.000040
Chrysene	mg/L	<0.000040
Dibenzo(a,h)anthracene	mg/L	<0.000010
Fluoranthene	mg/L	<0.000040
Fluorene	mg/L	<0.000040
Indeno(1,2,3-cd)pyrene	mg/L	<0.000040
Naphthalene	mg/L	<0.000050
Phenanthrene	mg/L	<0.000050
Pyrene	mg/L	<0.000040
Quinoline	mg/L	<0.000040
2-Fluorobiphenyl	%	85
Nitrobenzene d5	%	82
p-Terphenyl d14	%	105
B(A)P Total Potency Equivalent	mg/L	<0.000010

Table 2: Sampling Results in mg/L for Monitoring Station BOS-8, July 2011

Parameters		BOS-8A	BOS-8B	BOS-8C
ALS Lab Reference #		L1026374-1	L1026374-2	L1023112-3
Sample Date/Time		03Jul11/2011 11:50	03Jul11/2011 12:00	03Jul11/2011 12:10
Ammonia (as N)	mg/L	<0.050	<0.050	<0.050
Chloride (Cl)	mg/L	127	383	320
Conductivity (EC)	uS/cm	1050	1850	1450
pH	pH	7.99	7.60	7.51
Sulfate (SO4)	mg/L	233	254	150
Aluminum (Al)-Total	mg/L	0.0461	0.0145	0.0087
Antimony (Sb)-Total	mg/L	0.00124	0.00614	0.00214
Arsenic (As)-Total	mg/L	0.00274	0.00164	0.00151
Barium (Ba)-Total	mg/L	0.0386	0.0803	0.0612
Beryllium (Be)-Total	mg/L	<0.0050	<0.00050	<0.00050
Boron (B)-Total	mg/L	0.0497	0.128	0.108
Cadmium (Cd)-Total	mg/L	0.000015	0.000039	0.000014
Calcium (Ca)-Total	mg/L	79.1	226	161
Chromium (Cr)-Total	mg/L	0.00045	0.00018	0.00013
Cobalt (Co)-Total	mg/L	0.00064	0.00893	0.00130
Copper (Cu)-Total	mg/L	0.00278	0.00165	0.0094
Iron (Fe)-Total	mg/L	0.173	0.478	0.025
Lead (Pb)-Total	mg/L	0.000114	<0.000050	<0.000050
Lithium (Li)-Total	mg/L	<0.0050	0.0387	0.0227
Magnesium (Mg)-Total	mg/L	38.1	48.7	32.5
Manganese (Mn)-Total	mg/L	0.0136	0.0432	0.0109
Molybdenum (Mo)-Total	mg/L	0.000604	0.000609	0.000818
Nickel (Ni)-Total	mg/L	0.00804	0.0454	0.00885

Parameters		BOS-8A	BOS-8B	BOS-8C
Potassium (K)-Total	mg/L	7.3	13.2	9.15
Selenium (Se)-Total	mg/L	0.00041	0.00238	0.00137
Silver (Ag)-Total	mg/L	0.000093	0.000032	<0.000010
Sodium (Na)-Total	mg/L	51.4	54.7	48.9
Thallium (Tl)-Total	mg/L	<0.000050	<0.000050	<0.000050
Tin (Sn)-Total	mg/L	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Total	mg/L	0.00066	0.00044	<0.00030
Uranium (U)-Total	mg/L	0.000047	0.000020	<0.000010
Vanadium (V)-Total	mg/L	0.00021	0.00016	0.00011
Zinc (Zn)-Total	mg/L	0.0038	0.0055	<0.0030

2. PART J: ITEM 3 AND 4

Table 3 shows the results for samples collected from the sewage treatment plant effluent (BOS-3) in July. Samples from July 3, 2011 were found to be compliant with the licence for all parameters with the exception of fecal coliforms. The station was sampled again July 18, 2011 to determine if the non-compliant results could be attributed to sample handling error. The repeat sample from July 18, 2011 was also found to be non-compliant for fecal coliforms so adjustments were made to plant functioning and the ultraviolet (UV) disinfection lamp on the discharge line was cleaned. Subsequent samples taken in August confirmed the fecal coliform levels had returned to within compliance levels and these results will be reported in the monthly report for August. The cause of the upset has been attributed to increased camp loading numbers at the Boston camp during July and a slight lag in activity of bacterial colonies in the RBC to properly digest the larger volumes of effluent.

Table 3: Sampling Results in mg/L for Monitoring Station BOS-3, May 2011

Parameters	BOS-3	BOS-3	License # 2BB-BOS0712 Part D: Item 17
			Maximum Average Concentration
ALS Lab Reference #	L1026380-1	L1032738-1	
Sample Date/Time	July 3/11 14:20	July 18/11 06:00	
BOD ₅	37.1	17.1	80.0 mg/l
Total Suspended Solids	49.0	36.0	100.0 mg/l
Faecal Coliform	22,400	14,200	10,000 CFU/100ml
Oil and Grease (visible sheen)	No	No	No visible sheen
Oil and Grease	1.4	<1.0	mg/L
pH	6.96	7.04	6.0 – 9.5 pH unit

Samples were collected from BOS-4 during July, including the annual toxicity testing for acute lethality to Rainbow Trout and Daphnia magna (Table 4).

Table 4: Sampling Results in mg/L for Monitoring Station BOS-4, July 2011

Parameters	BOS-4
ALS Lab Reference #	L1026366-1
Sample Date/Time	July 2/11 15:30
BOD ₅	<2.0
Total Suspended Solids	<3.0
Faecal Coliform	<1
Oil and Grease (visible sheen)	No
Oil and Grease	<1.0
pH	7.23
Trout Bioassay LC50	No sublethal biological effects observed. No toxicity observed
Daphnia magna LC50	No toxicity observed

3. PART J: ITEM 11 AND 12

Water for drilling, as well as domestic use during July, is detailed in Table 5. Water from drilling was taken from Stickleback and Aimaokatalok (Spyder) Lake.

Table 5: Daily Drill Water Usage in cubic metres (m³), July 2011

Date	Drills				Domestic Usage	100 m ³ Daily
	Orbit 22	Orbit 24	Orbit 25	Drills Total		Daily Total
1	0	3.6	0	3.6	7.39	10.99
2	0	3.66	3.05	6.71	6.8	13.51
3	4.8	1.95	3.05	9.8	7.68	17.48
4	4.8	1.96	3.05	9.81	7.23	17.04
5	4.8	2.27	3.05	10.12	8.71	18.83
6	3.5	4.09	0	7.59	10.52	18.11
7	2.6	3.64	0.6	6.84	8.07	14.91
8	1.2	1.22	1.4	3.82	9.1	12.92
9	3.6	9.62	0.2	13.42	9.19	22.61
10	4.3	3.29	0.1	7.69	9.65	17.34
11	4.3	2.2	0.2	6.7	8.81	15.51
12	6.8	8.1	0	14.9	9.52	24.42
13	0.2	9.9	0	10.1	7.57	17.67
14	0	0	0	0	7.08	7.08
15	0	0	0	0	10.68	10.68
16	0	0	0	0	7.91	7.91
17	0	0	0	0	9.83	9.83
18	0	0	0	0	9.74	9.74
19	0	0	0	0	9.57	9.57
20	0	0	0	0	10	10
21	0	0	0	0	10.17	10.17
22	0	0	0	0	10.04	10.04
23	0	0	0	0	7.27	7.27
24	0	0	0	0	8.41	8.41
25	0	0	0	0	7.98	7.98
26	0	0	0	0	8.07	8.07
27	0	0	0	0	6.25	6.25
28	0	0	0	0	8.13	8.13
29	0	0	0	0	8.79	8.79
30	0	0	0	0	8.22	8.22
31	0	0	0	0	6.45	6.45
Monthly Total	40.9	55.5	14.7	111.1	264.83	375.93
Monthly Average	1.3	1.8	0.5	3.6	8.5	12.1
Monthly Min	0	0	0	0	6.25	6.25
Monthly Max	6.8	9.9	3.05	14.9	10.68	24.42
Previous Annual Cumulative				590.8	524.1	1114.9
Current Annual Cumulative				701.9	788.93	1490.83

4. PART J: ITEM 8 (REFERENCE TO PART F: ITEM 7)

Under-ice water quality samples were not collected from Aimaokatalok (Spyder) Lake in July as the lake was no longer frozen.

5. PART J: ITEM 12

No mine water was pumped from underground.

6. PART J: ITEM 13 AND 14

The volume of sewage effluent discharged from BOS-3 is shown in Table 6.

Table 6: Treated Sewage Effluent released in cubic metres (m³), July 2011

Parameters	Estimated Effluent BOS-3 (m ³)	Sludge Removed (m ³)
Annual Cumulative	775.37	-
Monthly Cumulative	252.96	-

7. INCIDENT REPORTING

There were two incidents reported during the month pertaining to this licence.

- 1) July 14/11 - Level 4 (Major). Drilling Contractor spilled an unspecified amount of brine solution and drill cuttings during the drilling process, leaching brine from the drill rig to the shore of Spyder Lake. This was reported to the Nunavut Spill Line by the drilling contractor and an investigation is ongoing (#11-281).
- 2) July 25/11 – Level 1 (Insignificant). The Sewage Treatment Facility was non-compliant with the Water Licence for fecal coliform counts for two sampling events in July, likely due to an increase in camp loading numbers and a lag time in bacterial functioning to adequately digest the effluent. Subsequent sampling indicated the plant has since come back into compliance with the criteria of the licence.

Should there be any questions regarding the monthly report for July 2011, please contact Chris Hanks, VP Environmental Affairs at 720-917-4489 or Chris.Hanks@Newmont.com.

Yours sincerely,

for

Chris Hanks

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Hope Bay Mining Limited