AGNICO-EAGLE
MEADOWBANK DIVISION

October 27, 2009

Via Email and Xpresspost

Mr. Richard Dwyer
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Phone: (867) 360-6338

Dear Mr. Dwyer,

Re: September 2009 Monitoring Program Summary Report

As required by Water license 2AM-MEA0815 Part I Item 25, please find the September 2009 Monitoring Program Summary Report enclosed.

Should you have any questions regarding this submission, please contact me directly at 819-763-0229 or via email at stephane.robert@agnico-eagle.com.

Regards,

Stéphane Robert
Environment Superintendent

Encl (1)

cc: *Ian Rumbolt, Indian and Northern Affairs Canada*
David Abernethy, Indian and Northern Affairs Canada
Andrew Keim, Indian and Northern Affairs Canada
Stephen Hartman, Kivalliq Inuit Association

AGNICO-EAGLE

MEADOWBANK GOLD PROJECT

Monitoring Program Summary Report

September 2009

Type A Water License 2AM-MEA0815

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SECTION 1 • BACKGROUND

As required under Part I, Item 25 of Type A Water License 2AM-MEA0815, this report documents the water management, monitoring activity and analytical monitoring at the Meadowbank mine site during September 2009.

It should be noted that the Meadowbank Project is in the construction phase and is not scheduled to commence operations until early 2010. Consequently many of the license specified reporting locations or requirements are associated with facilities that are not yet constructed and thus reporting cannot be fully initiated until these facilities are constructed and commissioned. The monitoring points covered by this monthly report will expand as the facilities are constructed. During this phase of construction no other water has been pumped, discharged or transferred, rather all site contact run-off are contained and directed to the Stormwater Management Pond (Tear Drop Attenuation Pond). Additionally, section 4 summarizes the AEM internal spill reporting for September.

SECTION 2 • WATER QUALITY MONITORING

2.1 DEWATERING OF SECOND PORTAGE ARM

There was no pumping in September as all of the dewatering pumps were shut down. The installation of the Total Suspended Solids (TSS) treatment plant is underway and will be completed in October.

2.2 DIKE MONITORING

The turbidity barriers were impaired at many locations due to a major windstorm on September 1st and 2nd which had winds gusting up to 90 km/h. Top cable was found intact all along the lines but vinyl fabric had ripped off the steel cable at several locations. It appears that the normal service conditions were largely exceeded during the windstorm despite the use of the best material available on the market. Given the widespread damage and the fact that the majority of the TSS generating activity is finished (rock platform and trenching), it was decided to use intact portions of the inner barriers to close the gaps in the outer barriers. All backfill was completed on September 16th and the outside curtain repair was completed on September 17th. Silt fence was placed in the two channels of Third Portage Lake (TPL) to help to contain the TSS in TPL. The plume is confined in the East basin of Third Portage Lake and is not spreading to the rest of TPL, Second Portage Lake and Tehek Lake. TSS levels in Second Portage Lake remain quite low (max = 2.2 mg/L).

In mid-September, the TSS concentrations inside the turbidity barrier were essentially the same as conditions outside. There was no indication of any elevated plumes within the work zone, indicating that construction activities are no longer resulting in sediment releases. Removal of the turbidity curtains started on September 30.

The concentrations of TSS decreased during the month:

- Short-term (24-hr): 53.9 mg/L to 7.05 mg/L - Limit is 50 mg/L
- 7-day mean: 48.4 to 7.7 mg/L - Limit is 15 mg/L
- Monthly mean (30 days): 28.5 mg/L to 18.2 mg/L - Limit is 15 mg/L.

Tables 2.1 and 2.2 summarize the September results for the Routine and High Value Habitat (HVH) Monitoring Stations. New TSS triggers, intended to provide protection to nearby high-value habitat areas, were applied at the HVH stations (25 mg/L for 24-hr average, and 6 mg/L for 30-day averages). These thresholds were applied to all of the HVH stations, with an exception; at BG-HVH3 and BG-HVH5 (which are deep stations), the new high value TSS triggers applied only at depths of 0 to 8 meters, while the non-HVH triggers applied only to the full water column at those two stations. For these two stations, two sets of results are reported in table 2.2 (BG-HVH3 and BGH3, BG-HVH5 and BGH5). The HVH stations are generally located in areas of high value habitat, but not necessarily exactly on high value habitat; rather, they tend to be positioned slightly towards the dike in order to provide an early warning of potential effects on high value habitat. In the case of BG-HVH3 and BG-HVH5, they happened to be in deep water, whereas real high value habitat does not occur at depths. The vertical differentiation in TSS levels that occurred lately made this very important, and this new approach avoids the error of applying TSS triggers for high value habitat to deep water at those two stations**.**

An effect assessment strategy (EAS) designed to evaluate the impact of the elevated TSS on the East basin of Third Portage Lake also commenced in mid-September with the following activities:

- Sediment traps deployed for the summer were retrieved and a selection of traps was redeployed for the winter.
- BG-EAS Round 1 - Water Quality/Limnology/Primary Productivity/Secondary Productivity - 25 samples and a 120 L bulk sample were collected from the BGE area (eastern half of the east basin) for toxicity testing.

Table 2.1: Bay-Goose TSS Monitoring – Routine Stations September 2009

	Station	BGW1				BGW2				BGW3			
	Time Period	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg
Date of Analysis	Time of Analysis												
3-Sep-09	21:00	13.63	no data	17.48	7.66	13.86	no data	114.66	34.55	11.18	no data	29.98	10.09
4-Sep-09	21:00	12.78	12.71	15.91	8.07	61.88	47.52	109.98	35.98	52.59	46.00	32.89	11.96
5-Sep-09	20:00	12.78	12.38	15.36	8.16	62.08	57.15	107.25	36.56	52.59	34.23	31.90	12.34
6-Sep-09	20:00	13.97	no data	13.57	8.62	15.45	no data	89.95	38.72	10.83	no data	26.19	13.03
7-Sep-09	21:00	13.97	13.50	12.95	8.85	28.43	18.30	35.50	38.51	26.42	15.16	23.63	13.22
8-Sep-09	21:00	12.78	12.46	12.88	9.04	30.64	29.54	34.73	38.96	26.42	20.36	23.21	13.60
9-Sep-09	21:00	12.51	12.12	12.76	9.45	15.73	14.74	31.91	39.62	16.34	15.15	21.58	14.15
10-Sep-09	21:00	11.73	11.36	12.48	9.75	15.73	12.97	30.56	39.93	15.42	14.82	18.39	14.56
11-Sep-09	21:00	10.99	10.92	12.31	9.95	11.59	9.66	28.50	40.21	15.42	14.67	17.98	14.89
12-Sep-09	21:00	8.77	no data	11.65	10.27	10.66	no data	16.48	40.88	8.63	no data	14.80	15.28
13-Sep-09	21:00	9.57	9.36	11.06	10.43	11.67	11.44	15.73	41.04	11.02	9.79	14.14	15.40
14-Sep-09	20:00	9.57	9.09	10.89	10.40	11.67	10.58	15.28	40.49	11.02	10.41	13.49	15.31
15-Sep-09	21:00	8.40	no data	10.29	10.61	9.09	no data	12.56	40.82	7.54	no data	12.17	15.56
16-Sep-09	19:00	8.42	no data	9.61	10.84	7.99	no data	10.25	41.11	8.42	no data	10.95	15.80
17-Sep-09	22:00	6.92	no data	8.75	11.14	6.83	no data	9.29	41.51	7.66	no data	9.24	16.11
18-Sep-09	20:00	6.92	6.86	8.26	11.13	8.22	7.53	8.90	41.09	8.10	7.88	8.57	16.29
19-Sep-09	21:00	6.52	no data	8.02	11.41	7.22	no data	8.72	41.80	8.10	7.51	8.42	16.38
20-Sep-09	19:00	7.07	6.80	7.76	11.41	7.22	6.78	8.23	41.50	7.31	7.11	8.27	16.33
21-Sep-09	19:00	7.07	6.89	7.28	11.47	6.83	6.58	7.47	41.32	7.31	6.87	7.63	16.33
22-Sep-09	21:00	6.70	6.61	6.98	11.54	6.83	6.75	7.17	41.48	6.43	6.41	7.37	16.40
23-Sep-09	20:30	5.87	no data	6.65	11.64	6.31	no data	6.98	41.58	6.43	6.41	7.24	16.51
24-Sep-09	19:00	5.15	no data	6.46	11.78	6.70	no data	6.90	41.96	7.66	no data	7.02	16.74
25-Sep-09	0:00	NS	NS	6.46	11.78	NS	NS	6.90	41.96	NS	NS	7.02	16.74
26-Sep-09	20:00	6.28	no data	6.16	10.83	6.00	no data	6.53	41.69	6.80	no data	6.91	16.85
27-Sep-09	20:00	6.28	6.18	6.10	10.57	6.12	6.06	6.46	40.45	6.83	6.81	6.88	16.36
28-Sep-09	19:00	5.72	no data	5.85	9.99	5.97	no data	6.31	36.66	6.06	no data	6.87	14.97
29-Sep-09	16:00	5.72	5.53	5.75	9.53	6.03	6.00	6.24	32.08	6.06	6.03	6.84	13.77

	Station	BGE1				BGE2				BGE3			
	Time Period	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg
Date of Analysis	Time of Analysis												
3-Sep-09	21:00	NS	NS	NS	NS	20.70	no data	156.39	99.78	32.00	no data	114.75	81.23
4-Sep-09	21:00	NS	NS	NS	NS	25.65	22.03	116.34	101.30	60.91	58.26	93.67	83.13
5-Sep-09	20:00	NS	NS	NS	NS	25.65	19.31	108.56	99.77	60.91	48.79	89.55	82.38
6-Sep-09	20:00	NS	NS	NS	NS	NS	NS	108.56	99.77	NS	NS	89.55	82.38
7-Sep-09	21:00	16.04	no data	12.22	9.63	17.65	17.59	19.51	100.53	22.38	18.83	35.14	84.20
8-Sep-09	21:00	NS	NS	12.22	9.63	NS	NS	19.51	100.53	NS	NS	35.14	84.20
9-Sep-09	21:00	14.46	no data	15.25	10.50	27.77	22.96	19.25	101.12	45.25	36.25	32.54	83.66
10-Sep-09	21:00	NS	NS	15.25	10.50	27.77	21.72	18.91	101.64	45.25	30.19	29.44	84.31
11-Sep-09	21:00	NS	NS	15.25	10.50	15.96	15.45	18.52	102.07	22.65	21.83	28.60	84.87
12-Sep-09	21:00	NS	NS	15.25	10.50	13.12	no data	17.62	103.58	14.72	no data	24.07	84.58
13-Sep-09	21:00	12.80	no data	14.17	11.66	13.12	13.12	17.10	102.27	14.72	13.86	22.90	83.32
14-Sep-09	20:00	12.80	no data	14.17	11.66	13.44	13.28	16.56	102.00	13.55	13.27	21.85	82.24
15-Sep-09	21:00	12.27	no data	13.26	12.20	13.97	13.71	15.77	102.34	13.55	12.35	19.59	80.22
16-Sep-09	19:00	12.27	11.03	12.19	12.24	10.16	no data	14.84	103.02	10.47	no data	17.43	76.86
17-Sep-09	22:00	9.65	no data	11.42	12.23	9.74	no data	12.56	103.94	10.52	no data	13.16	75.38
18-Sep-09	20:00	NS	NS	11.42	12.23	9.74	9.50	11.80	102.23	10.52	10.48	11.71	74.16
19-Sep-09	21:00	8.51	no data	10.70	11.91	9.77	no data	11.47	101.71	10.44	9.82	11.47	73.97
20-Sep-09	19:00	8.51	8.34	10.45	11.83	9.77	9.14	11.06	98.51	9.20	9.01	10.91	72.39
21-Sep-09	19:00	8.97	8.57	9.29	11.71	8.80	8.66	9.88	88.93	8.94	8.89	9.98	64.96
22-Sep-09	21:00	8.97	8.73	9.21	11.53	9.00	8.90	9.33	83.71	8.94	8.63	9.62	62.05
23-Sep-09	20:30	8.48	8.26	8.89	11.22	10.08	no data	9.21	77.07	8.25	no data	9.16	58.84
24-Sep-09	19:00	NS	NS	8.89	11.22	8.54	no data	9.23	69.36	8.42	no data	9.03	53.09
25-Sep-09	0:00	NS	NS	8.89	11.22	NS	NS	9.23	69.36	NS	NS	9.03	53.09
26-Sep-09	20:00	NS	NS	8.89	11.22	8.13	no data	8.87	51.46	8.31	no data	8.47	42.61
27-Sep-09	20:00	8.42	no data	8.35	10.98	8.13	7.87	8.73	48.42	8.31	7.99	8.41	39.24
28-Sep-09	19:00	7.43	no data	8.18	10.96	8.16	no data	8.55	35.06	7.57	no data	8.15	32.92
29-Sep-09	16:00	7.43	7.31	8.05	10.91	8.16	7.80	8.28	29.61	7.57	7.57	8.06	30.08

	Station	BGE4				BGE5				BGE6			
	Time Period	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg
Date of Analysis	Time of Analysis												
3-Sep-09	21:00	32.89	no data	47.92	18.33	83.56	no data	85.95	39.96	14.39	no data	7.53	5.27
4-Sep-09	21:00	24.25	20.12	45.01	19.38	29.16	23.13	80.02	42.06	13.78	13.07	8.96	5.93
5-Sep-09	20:00	24.25	20.36	42.21	19.41	29.16	22.25	75.02	41.66	13.78	13.06	9.46	6.09
6-Sep-09	20:00	NS	NS	42.21	19.41	NS	NS	75.02	41.66	NS	NS	9.46	6.09
7-Sep-09	21:00	18.45	15.57	19.79	20.29	17.30	15.43	27.09	42.32	13.31	12.74	13.25	7.01
8-Sep-09	21:00	NS	NS	19.79	20.29	NS	NS	27.09	42.32	NS	NS	13.25	7.01
9-Sep-09	21:00	15.11	15.01	18.05	20.92	15.98	14.50	23.05	42.75	13.60	13.36	13.31	7.78
10-Sep-09	21:00	14.91	13.95	16.17	21.20	15.98	13.70	15.66	43.03	14.39	13.82	13.25	8.17
11-Sep-09	21:00	13.47	13.31	15.85	21.50	12.48	12.12	15.28	43.34	13.57	13.10	13.24	8.47
12-Sep-09	21:00	13.31	no data	13.88	22.19	13.47	no data	13.34	44.26	10.96	no data	13.02	8.98
13-Sep-09	21:00	13.31	12.95	13.77	22.13	13.47	13.23	13.33	43.90	13.10	12.04	12.91	9.12
14-Sep-09	20:00	13.20	12.90	13.54	22.91	13.12	13.06	13.17	44.06	13.10	11.35	12.69	9.64
15-Sep-09	21:00	13.20	12.11	13.23	22.57	13.12	12.28	13.01	43.13	9.54	8.84	11.89	9.61
16-Sep-09	19:00	10.05	no data	12.73	22.83	10.74	no data	12.64	41.67	10.41	no data	11.43	9.84
17-Sep-09	22:00	9.37	no data	11.80	23.03	9.54	no data	11.99	41.00	8.94	no data	10.45	10.11
18-Sep-09	20:00	9.65	9.51	11.13	22.77	9.54	9.43	11.41	40.43	8.94	8.47	9.88	10.09
19-Sep-09	21:00	8.91	no data	10.86	22.95	10.22	no data	11.17	40.94	8.45	no data	9.64	10.12
20-Sep-09	19:00	8.91	8.81	10.42	22.75	10.22	9.50	10.77	40.45	9.06	8.76	8.95	10.11
21-Sep-09	19:00	8.74	8.73	9.48	22.76	8.77	8.71	9.84	39.95	9.06	8.89	8.94	10.09
22-Sep-09	21:00	8.74	8.53	9.15	22.60	8.71	8.68	9.43	40.03	8.71	8.71	8.86	10.12
23-Sep-09	20:30	8.10	no data	8.83	22.39	8.86	no data	9.13	39.27	7.90	no data	8.55	10.10
24-Sep-09	19:00	7.96	no data	8.71	21.98	8.86	8.51	9.04	37.34	7.90	7.85	8.44	10.09
25-Sep-09	0:00	NS	NS	8.71	21.98	NS	NS	9.04	37.34	NS	NS	8.44	10.09
26-Sep-09	20:00	7.99	no data	8.29	21.41	7.99	no data	8.57	32.40	7.72	no data	8.26	10.00
27-Sep-09	20:00	8.66	8.32	8.24	20.39	8.40	8.19	8.43	30.78	8.66	8.19	8.19	10.03
28-Sep-09	19:00	7.43	no data	8.08	18.63	7.51	no data	8.25	27.16	7.19	no data	7.95	10.07
29-Sep-09	16:00	7.43	7.25	7.95	17.59	7.51	7.44	8.06	25.30	7.19	6.75	7.74	10.09

Notes:

1. TSS concentrations (mg/L) are calculated from a TSS-turbidity regression equation, which is updated as new TSS data are generated.
2. If a cell has "n/a" after the number, this means that sampling has not yet covered the specified period (24h or 7-d), but the average up to that date and time is still calculated.
3. "NS" = not sampled that day.
4. "no data" is listed for the 24-hr Avg value for cases where only one data point was collected in the past 24hrs; the 24hr Max value applies.

5. Red cells are exceedances of licenced 24hr Avg or 30-d Avg TSS thresholds for a particular station at a particular time; yellow cells highlight exceedances of 24hr Max or 7-d Avg TSS management levels.
6. TSS thresholds are as follows (mg/L): (a) 24-h at BG-HVH (high value habitat) stations after Sept 1 = 25 (b) all other cases 24-h threshold = 50 (c) 30-d at BGH stations after Sept 1 = 6 (d) all other cases 30-d threshold = 15.

Table 2.2: Bay-Goose TSS Monitoring – High Value Habitat Stations September 2009

	Station	BG-HVH1				BG-HVH2				BGH3 (full depth profile; HVH thresholds do not apply)			
	Time Period	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg
Date of Analysis	Time of Analysis												
3-Sep-09	21:00	13.73	no data	6.39	4.67	14.44	no data	8.10	5.61	16.01	no data	43.17	17.48
4-Sep-09	21:00	16.49	14.40	8.44	5.37	14.83	13.81	9.16	6.25	12.75	12.42	35.63	18.10
5-Sep-09	20:00	16.49	11.34	8.91	5.47	14.83	13.38	9.75	6.40	16.85	14.14	33.90	18.04
6-Sep-09	20:00	9.06	no data	9.55	5.81	NS	NS	9.75	6.40	NS	NS	33.90	18.04
7-Sep-09	21:00	9.06	8.33	10.67	5.92	13.12	13.10	12.92	7.28	15.40	14.68	14.75	18.95
8-Sep-09	21:00	NS	NS	10.67	5.92	NS	NS	12.92	7.28	NS	NS	14.75	18.95
9-Sep-09	21:00	12.22	11.14	10.27	6.42	13.36	12.79	12.85	7.99	14.07	13.10	14.66	19.62
10-Sep-09	21:00	17.93	14.59	10.10	6.86	13.39	13.13	12.76	8.36	12.94	12.56	14.45	19.95
11-Sep-09	21:00	17.93	15.37	10.69	7.23	11.92	11.76	12.65	8.62	12.35	12.34	14.20	20.21
12-Sep-09	21:00	7.57	no data	11.05	7.36	10.80	no data	12.35	9.12	12.35	no data	13.32	20.85
13-Sep-09	21:00	11.27	9.46	10.88	7.45	12.46	11.79	12.27	9.27	12.35	11.88	13.11	21.13
14-Sep-09	20:00	11.27	10.12	11.14	7.63	12.46	11.76	12.15	9.48	12.62	11.99	12.92	20.94
15-Sep-09	21:00	7.84	no data	11.25	7.86	9.43	no data	11.69	9.78	11.95	no data	12.31	21.23
16-Sep-09	19:00	9.51	8.68	10.89	8.11	9.68	no data	11.32	10.03	10.58	no data	12.11	21.23
17-Sep-09	22:00	6.95	no data	9.15	8.37	9.17	no data	10.56	10.21	8.80	no data	11.49	21.63
18-Sep-09	20:00	7.10	7.02	8.60	8.35	9.17	8.76	10.13	10.18	8.97	8.89	10.92	21.37
19-Sep-09	21:00	7.10	6.90	8.37	8.55	8.05	no data	9.63	10.22	8.97	8.87	10.63	21.35
20-Sep-09	19:00	7.22	6.96	7.79	8.56	8.51	8.28	9.39	10.19	8.80	8.79	10.29	21.45
21-Sep-09	19:00	7.90	7.56	7.64	8.56	8.51	8.48	8.85	10.19	8.80	8.58	9.42	21.56
22-Sep-09	21:00	8.02	7.96	7.69	8.56	8.60	8.53	8.68	10.20	9.60	8.99	9.36	21.49
23-Sep-09	20:30	8.02	no data	7.43	8.59	8.25	no data	8.64	10.10	7.72	no data	8.98	21.48
24-Sep-09	19:00	7.16	no data	7.45	8.65	7.66	no data	8.36	10.05	8.63	no data	8.70	21.48
25-Sep-09	0:00	NS	NS	7.45	8.65	NS	NS	8.36	10.05	NS	NS	8.70	21.48
26-Sep-09	20:00	7.51	no data	7.55	8.67	8.25	no data	8.21	9.97	8.10	no data	8.54	19.18

27-Sep-09	20:00	7.51	7.51	7.61	8.75	8.25	7.96	8.18	9.94	8.10	7.85	8.44	18.30
28-Sep-09	19:00	5.94	no data	7.39	8.81	7.54	no data	7.96	9.98	7.63	no data	8.17	16.06
29-Sep-09	16:00	6.46	6.20	7.13	8.87	7.54	7.11	7.78	9.98	8.19	7.91	8.06	15.17

	Station	**BG-HVH3** (0 to 8m depths only)				**BG-HVH4**				**BGH5** (full depth profile; HVH thresholds do not apply)			
	Time Period	**24h Max**	**24h Avg**	**7-d Ave**	**30-d Avg**	**24h Max**	**24h Avg**	**7-d Ave**	**30-d Avg**	**24h Max**	**24h Avg**	**7-d Ave**	**30-d Avg**
Date of Analysis	**Time of Analysis**												
3-Sep-09	21:00	16.01	no data	8.43	5.29	17.75	no data	8.44	6.18	11.48	no data	16.90	7.82
4-Sep-09	21:00	12.40	12.04	10.20	5.94	15.34	14.45	10.66	6.91	11.97	11.54	16.57	8.42
5-Sep-09	20:00	16.44	13.76	10.59	6.13	19.02	16.41	11.27	7.15	14.72	12.48	16.98	8.52
6-Sep-09	20:00	NS	NS	10.59	6.13	NS	NS	11.27	7.15	NS	NS	16.98	8.52
7-Sep-09	21:00	15.40	14.68	14.53	7.26	13.52	12.87	15.88	8.28	13.65	13.22	12.94	9.43
8-Sep-09	21:00	NS	NS	14.53	7.26	NS	NS	15.88	8.28	NS	NS	12.94	9.43
9-Sep-09	21:00	12.80	12.46	14.31	8.05	16.70	16.61	15.56	9.11	12.16	12.07	12.89	10.13
10-Sep-09	21:00	12.75	12.25	14.08	8.38	16.52	14.46	15.37	9.52	12.80	11.99	12.95	10.45
11-Sep-09	21:00	12.32	11.59	13.79	8.65	13.20	12.99	15.10	9.82	12.80	12.24	12.87	10.74
12-Sep-09	21:00	12.35	no data	12.92	9.19	13.34	no data	14.00	10.39	12.99	no data	12.48	11.30
13-Sep-09	21:00	12.35	11.80	12.75	9.50	13.34	12.88	13.84	10.71	12.99	11.09	12.32	11.37
14-Sep-09	20:00	12.62	11.97	12.58	9.55	13.31	12.95	13.81	10.77	10.47	9.79	11.93	11.51
15-Sep-09	21:00	11.51	no data	12.07	9.91	11.43	no data	13.39	11.10	11.59	no data	11.51	11.76
16-Sep-09	19:00	10.58	no data	11.90	10.11	9.96	no data	12.82	11.32	9.29	no data	11.32	11.87
17-Sep-09	22:00	8.80	no data	11.41	10.35	8.94	no data	11.80	11.49	9.37	no data	10.67	11.92
18-Sep-09	20:00	8.91	8.86	10.83	10.32	9.34	9.14	11.09	11.39	9.37	9.33	10.10	11.88
19-Sep-09	21:00	8.91	8.71	10.53	10.32	9.43	no data	10.85	11.28	9.29	8.74	9.91	11.99
20-Sep-09	19:00	8.51	8.42	10.16	10.34	9.43	8.86	10.42	11.29	8.63	8.41	9.62	11.97
21-Sep-09	19:00	8.34	8.32	9.26	10.40	8.60	8.44	9.37	11.25	8.68	8.66	9.21	11.98
22-Sep-09	21:00	8.31	8.02	9.10	10.39	8.60	8.51	9.01	11.17	8.68	8.22	8.83	12.04
23-Sep-09	20:30	7.46	no data	8.59	10.39	8.16	no data	8.90	11.06	7.72	no data	8.51	12.06
24-Sep-09	19:00	7.96	no data	8.22	10.39	7.87	no data	8.65	11.02	8.57	no data	8.45	12.09
25-Sep-09	0:00	NS	NS	8.22	10.39	NS	NS	8.65	11.02	NS	NS	8.45	12.09
26-Sep-09	20:00	7.72	no data	7.94	10.50	7.31	no data	8.14	11.06	7.99	no data	8.24	12.01

27-Sep-09	20:00	7.72	7.62	7.85	10.55	7.81	7.56	8.00	11.06	7.99	7.81	8.18	11.91
28-Sep-09	19:00	7.40	no data	7.67	10.58	7.40	no data	7.77	11.15	7.13	no data	7.94	11.83
29-Sep-09	16:00	7.40	7.22	7.63	10.61	7.40	7.26	7.62	11.19	7.22	7.17	7.87	11.67

	Station	**BG-HVH5** (0 to 8m depths only)			
	Time Period	**24h Max**	**24h Avg**	**7-d Ave**	**30-d Avg**
Date of Analysis	**Time of Analysis**				
3-Sep-09	21:00	11.32	no data	8.17	5.26
4-Sep-09	21:00	11.97	11.54	9.02	5.84
5-Sep-09	20:00	14.72	12.48	9.62	6.00
6-Sep-09	20:00	NS	NS	9.62	6.00
7-Sep-09	21:00	13.65	13.22	12.92	6.99
8-Sep-09	21:00	NS	NS	12.92	6.99
9-Sep-09	21:00	12.16	12.07	12.88	7.72
10-Sep-09	21:00	12.80	10.83	12.77	8.02
11-Sep-09	21:00	12.80	12.24	12.71	8.31
12-Sep-09	21:00	12.99	no data	12.27	8.87
13-Sep-09	21:00	12.99	11.05	12.13	8.97
14-Sep-09	20:00	10.47	9.75	11.75	9.14
15-Sep-09	21:00	11.59	no data	11.30	9.39
16-Sep-09	19:00	9.29	no data	11.14	9.54
17-Sep-09	22:00	9.37	no data	10.66	9.65
18-Sep-09	20:00	9.37	9.19	10.06	9.66
19-Sep-09	21:00	9.00	8.60	9.86	9.72
20-Sep-09	19:00	8.34	8.26	9.56	9.72
21-Sep-09	19:00	8.34	8.13	9.06	9.73
22-Sep-09	21:00	7.93	7.84	8.62	9.78
23-Sep-09	20:30	7.72	no data	8.28	9.80
24-Sep-09	19:00	7.34	no data	8.17	9.81
25-Sep-09	0:00	NS	NS	8.17	9.81
26-Sep-09	20:00	7.37	no data	7.71	9.88

27-Sep-09	20:00	7.63	7.50	7.63	9.90
28-Sep-09	19:00	7.13	no data	7.47	9.92
29-Sep-09	16:00	7.13	6.93	7.35	9.95

Notes:

1. TSS concentrations (mg/L) are calculated from a TSS-turbidity regression equation, which is updated as new TSS data are generated.
2. If a cell has "n/a" after the number, this means that sampling has not yet covered the specified period (24h or 7-d), but the average up to that date and time is still calculated.
3. "NS" = not sampled that day.
4. "no data" is listed for the 24-hr Avg value for cases where only one data point was collected in the past 24hrs; the 24hr Max value applies.
5. Red cells are exceedances of licenced 24hr Avg or 30-d Avg TSS thresholds for a particular station at a particular time; yellow cells highlight exceedances of 24hr Max or 7-d Avg TSS management levels.
6. TSS thresholds are as follows (mg/L): (a) 24-h at BG-HVH (high value habitat) stations after Sept 1 = 25 (b) all other cases 24-h threshold = 50 (c) 30-d at BGH stations after Sept 1 = 6 (d) all other cases 30-d threshold = 15.

SECTION 3 • WATER MANAGEMENT

3.1 WATER USAGE

Under Water License 2AM-MEA0815, the total water consumption limit is 700,000 m^3/year or 58,333 m^3/month for the batch plant, domestic and milling water use. During the month, the number of people on site by day was 517. The total consumption of water for the camp, the batch plant and the mine site was 3,686 m^3 for the month, an average of 122.9 m^3 a day.

Table 3.1: September 2009 Water Usage

	Water Usage (m^3)
Batch Plant	402
Water Treatment Plant	2,617
Water for Dust Control	667
Total for the Site	**3,686**

3.2 SEWAGE TREATMENT PLANT MONITORING

At the sewage treatment plant, two systems are now in operation (the Seprotech L333 and the two Little John LJ100s). Four water samples were taken at the effluent. The results showed the two sewage treatment plants (STP) are working well.

Table 3.2: September 2009 STP Effluent Results

Station: STP-OUT				
Parameter	**9/7/2009**	**9/14/2009**	**9/21/2009**	**9/28/2009**
NH3-NH4 (mg/L)	26.1	29.3	26.7	28.6
BOD-5 (mg/L)	14	28	18	30
COD (mg/L)	101	96	141	116
TSS (mg/L)	32	108	20	44
NO2-NO3 (mg N/L)	45.6	53.3	47.2	55.5
pH	5.82	5.55	5.83	5.45
P tot (mg P/L)	15.2	19.9	21.1	20.3
Fecal Coliform (CFU/100mL)	84	510	20	30
Total Coliform (CFU/100mL)	1,000	3,000	1,000	<1,000
Atypical Colony (CFU/100mL)	96,000	183,000	140,000	23,000

SECTION 4 • SPILL MANAGEMENT SUMMARY

During the construction phase as part of the Environmental Management System, AEM is developing a system of tracking spills on-site. Table 4.1 summarizes the AEM Internal spill reports for September.

Table 4.1: Summary of September 2009 AEM Internal Spill Reports

Date of Spill	Hazardous Material (Fuel, Oil, etc.)	Quantity	Location	Cause of Spill	Clean-up Action Taken	Reported to Spill GN Hotline
9/10/2009	Glycol	1100 L	LD3	Cubes stacked ineffectively in the seacan. The forklift was trying to remove the cube and punched the cube with the fork.	Absorbent applied to the spill. Contaminated soil taken to Quarry 22 (approx. 10 to 20 tons removed). Composite samples taken from bottom and the sides.	Y
9/19/2009	Anti-freeze	3 L	Front of Main Entrance	Radiator had holes in it.	Applied absorbent.	N
9/20/2009	Diesel	80 L	On the bermed area of the tank farm	Human error. Misjudged the capacity of the tank.	Contaminated soil collected and taken to Quarry 22.	N
9/20/2009	Hydraulic oil	20 L	On drill pattern #5145071 in the pit	Hose burst.	Contaminated soil collected in a pail and placed in a dedicated seacan container at FGL area.	N
9/26/2009	Waste oil and grease	45 L	Baker Lake marshalling area	Leak of product inside HAZMAT seacan.	Moved Seacan to Quarry 6 and changed the leaking bag.	N
9/26/2009	Waste oil mixed with water	30 L	Baker Lake marshalling area	Leak of product inside HAZMAT seacan.	Moved Seacan to Quarry 6 and changed the leaking bag.	N
9/26/2009	Transmission oil	5 L	Construction warehouse	Broken Clam hose.	Applied absorbent to the spill. Contaminated soil collected and taken to Quarry 22.	N
9/28/2009	Diesel	400 L	Refuelling Area (contained in a membrane)	Overfilling diesel tank and leaving hose attached to the tank.	Placed absorbent on the spill and picked up the contaminated soil. Material taken to Quarry 22.	Y
9/29/2009	Diesel	4 m^2	Refuelling Area	Unknown.	Used absorbent.	N
9/29/2009	Anti-freeze	< 1 L	Operations parking lot	Truck leaked.	Used absorbent pads. Truck taken in for inspection.	N
9/30/2009	Diesel	10 L	Km 43 AWPAR	Truck rolled over while travelling on AWPAR.	Used absorbent to contain the leak. Also put absorbent on the ground as a preventive measure.	N