

Rio Algom Mining LLC

August 14, 2012

Certified Mail: (7010 1870 0000 3702 9658)

Mr. David L. Mayerson
New Mexico Environment Department
1190 St Francis Dr.
P.O. Box 5469
Santa Fe, NM 87502

Re: **Discharge Plan - 169**
Semi-Annual Report, 1st Half 2012

Dear Mr. Mayerson:

Attached is the Rio Algom Mining LLC's semi-annual groundwater monitoring report for the 1st half of 2012. This permit requires the monitoring and reporting of well data from the alluvium in the vicinity of the tailings area. A CD copy of the analytical results is included under cover of this letter (NMED copy only).

If you have any questions or need additional information, please call me at 505-287-8851, ext 15.

Regards,



Chuck Wentz
Environmental Department Supervisor/RSO

Attachment: As stated

cc: NRC (MD) – License SUA-1473, Docket No. 40-8905
B. Ray
D. Murray

AMSS01
AMSS

RIO ALGOM MINING LLC – AMBROSIA LAKE FACILITY

DISCHARGE PLAN – 169 (DP-169) SEMI-ANNUAL REPORT, 1st HALF 2012

Review of Discharge Plan - 169

New Mexico Environment Department's (NMED) Discharge Permit DP-169 was approved on November 15, 1995 and establishes monitoring requirements for the alluvium that has been affected as a result of byproduct material disposal at the Ambrosia Lake site.

Table 1 provided below presents the DP-169 groundwater monitoring data for the 1st Half 2012.

Table 1
DP-169 Sampling Results – 1st Half 2012

Monitor Well	Date	Depth to Water (ft)	Total Depth (ft)	Specific Cond.	Temp. (C)	pH	Cl (mg/l)	NO ₃ (mg/l)	SO ₄ (mg/l)	TDS (mg/l)
30-03	03/12/12	Dry	17.84							
30-04*	03/12/12	Casing Failed								
30-46	03/21/12	Dry	38.26							
30-47	03/12/12	49.66	77.66	4370	11.8	6.35	740	0.05	2300	4360
30-48	03/12/12	58.23	78.65	3900	12.0	6.36	850	0.09	1900	4050
30-49	03/12/12	62.89	67.41	5580	12.9	6.45	1300	0.02	3300	6720
30-53	03/21/12	Dry	49.81							
30-68*	03/21/12	Dry	63.18							
31-05*	03/12/12	44.71	63.48	941	13.1	8.09	82	<0.02	183	570
31-61 ALL	05/22/12	14.44	29.16	12200	11.9	6.40	2400	2.03	5900	14300
31-61 ALL	02/14/12	14.04	29.16	10870	11.5	6.33	2500	1.84	5800	13500
31-63	07/17/07	Removed from service when the interceptor trench was discontinued								
31-65 ALL	05/22/12	16.40	45.95	10950	12.3	6.36	2500	0.12	5300	14300
31-65 ALL	02/14/12	16.01	46.00	10000	11.8	6.39	2500	0.1	5500	13300
31-70*	03/13/12	28.83	31.12	6370	12.3	6.92	730	36.3	4100	7760
31-71	03/13/12	43.54	62.95	4380	12.2	7.18	590	2.04	2300	4580
32-01*	03/21/12	Casing Failed								
32-02*	03/21/12	Casing Failed								
32-41	03/12/12	34.98	57.29	3670	12.8	8.47	900	<0.02	780	2480
32-42	07/12/11	Dry	28.38							
32-43N	03/13/12	23.63	76.11	7490	13.1	6.81	1800	4.02	3400	8590
32-50	06/04/06	Dry								
32-51	03/20/12	32.37	74.36	4550	11.1	7.67	390	8.8	2700	5070
32-52	03/20/12	31.72	66.12	3010	11.5	8.84	250	<0.02	1480	2550
32-56	03/19/12	Dry	57.20							
32-57	03/19/12	44.58	53.15	5220	10.5	7.06	410	17.1	1500	5430
32-58	03/20/12	15.41	34.26	8420	10.8	6.55	2780	22.2	2300	8090
32-59 ALL	05/21/12	18.66	27.97	4970	13.6	7.33	560	0.25	2300	4730
32-59 ALL	02/20/12	18.09	28.02	4670	10.4	7.44	610	0.25	2300	4630
32-60	03/13/12	13.48	27.46	8780	12.0	6.56	1900	3.55	4700	10400
32-69	03/13/12	38.71	65.88	5560	12.3	6.77	1200	9.9	2300	5680
32-72	03/20/12	19.02	39.90	5310	11.7	6.85	790	3.77	2600	5670
5-01	03/19/12	26.99	44.11	3400	12.5	8.84	250	0.57	2200	3490

Table 1 - Continued

Monitor Well	Date	Depth to Water (ft)	Total Depth (ft)	Specific Cond.	Temp. (C)	pH	Cl (mg/l)	NO ₃ (mg/l)	SO ₄ (mg/l)	TDS (mg/l)
5-02	03/19/12	25.34	38.15	3110	12.0	8.12	580	0.35	340	1940
5-03 ALL*	05/21/12	24.81	41.20	4580	13.5	7.59	495	0.2	1900	4010
5-03 ALL	02/14/12	24.31	41.27	3880	12.0	9.59	470	0.1	1790	3440
5-04 ALL	05/21/12	21.44	63.85	5080	13.4	6.97	840	0.09	2400	5130
5-04 ALL	02/14/12	21.23	63.89	4590	11.5	6.98	860	0.07	2000	4870
5-08 ALL*	05/21/12	31.11	87.07	3730	15.0	6.98	450	0.16	1700	3310
5-08 ALL	02/14/12	30.82	87.11	3490	12.1	6.31	430	0.04	1670	3300
5-73 ALL*	05/21/12	17.13	31.34	6540	12.1	7.22	1900	0.23	1600	5530
5-73 ALL	02/14/12	16.88	31.34	5770	11.8	7.10	1770	0.32	1520	5240
AW-1	03/12/12	53.00	81.07	5350	12.9	6.89	680	10.1	3300	6360
AW-2	03/20/12	33.54	83.45	4460	11.5	7.45	300	4.77	2800	5140
C-3	06/13/95	Removed plugged & abandoned to facilitate site reclamation activities								
D-4	02/27/06	Removed plugged & abandoned to facilitate site reclamation activities								
E-5	02/27/06	Removed plugged & abandoned to facilitate site reclamation activities								
MW-24 ALL	05/21/12	Dry	50.14							
MW-24 ALL	02/23/12	Dry	50.14							
S-12	03/13/12	12.89	27.75	9420	12.9	6.69	2600	0.03	4700	11800
S-9	03/20/12	8.83	22.85	8290	10.1	8.83	2200	0.03	3800	10100

Notes:

(*) Indicates wells scheduled for replacement

Reported wells are in the alluvium formation, Wells marked with "ALL" are alluvial wells also reported to the U.S. NRC according to the Alternative Concentration Limit (ACL) criterion