

Rio Algom Mining LLC

October 6, 2017

ADDRESSEE ONLY

Document Control Desk
Director
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC
20555-0001

Re: **License SUA-1473, Docket No. 40-8905**
Supplement to Semiannual Effluent Report – 1st Half 2017

Dear Mr. Kurian,

Please find attached the particulate monitoring data for the 4th quarter of 2016. This information was not available for the Semiannual Effluent Report–2nd Half 2016 because the laboratory was delayed in reporting the data. This information was to be included in the Semiannual Effluent Report–1st Half 2017 dated August 23, 2017. As such, please consider the attached data as a supplement to this effluent report.

If you have any questions or need additional information, please do not hesitate to call me at (505) 298-4224.

Regards,



Michael Schierman
Radiation Safety Officer

Attachment

cc: Mr. Varughese Kurian, Project Manager

IE48
NM5520

High Volume Environmental Air Samples 2016

3rd Quarter					4th Quarter				
					Substation				
Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit	Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit
U-nat	2.4E-18	8.1E-23	2.4E-18	< 1.0	U-nat	3.0E-18	2.4E-19	2.0E-18	< 1.0
Th-230	4.2E-18	4.6E-18	7.0E-18	< 1.0	Th-230	1.0E-18	6.2E-18	8.7E-18	< 1.0
Ra-226	4.8E-18	2.0E-18	3.8E-18	< 1.0	Ra-226	2.3E-18	2.0E-18	1.7E-18	< 1.0
Pb-210	8.4E-16	3.7E-17	4.4E-17	< 1.0	Pb-210	6.9E-16	2.9E-17	4.5E-17	< 1.0

3rd Quarter					4th Quarter				
					Section 17 VH4				
Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit	Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit
U-nat	2.4E-18	8.1E-23	2.4E-18	< 1.0	U-nat	3.0E-18	2.4E-19	2.5E-18	< 1.0
Th-230	5.6E-18	4.3E-18	7.1E-18	< 1.0	Th-230	1.7E-18	5.6E-18	8.8E-18	< 1.0
Ra-226	4.5E-18	1.9E-18	3.5E-18	< 1.0	Ra-226	-5.9E-19	3.1E-18	2.0E-18	< 1.0
Pb-210	9.2E-16	4.1E-17	5.7E-17	< 1.0	Pb-210	7.3E-16	3.1E-17	4.7E-17	< 1.0

3rd Quarter					4th Quarter				
					Mill Diversion				
Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit	Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit
U-nat	2.7E-18	9.0E-23	2.7E-18	< 1.0	U-nat	3.1E-18	2.5E-19	3.1E-18	< 1.0
Th-230	7.5E-18	5.7E-18	7.3E-18	< 1.0	Th-230	1.1E-17	6.3E-18	7.8E-18	< 1.0
Ra-226	4.7E-18	2.7E-18	6.1E-18	< 1.0	Ra-226	2.5E-18	1.3E-18	1.5E-18	< 1.0
Pb-210	1.1E-15	4.5E-17	4.9E-17	< 1.0	Pb-210	1.0E-15	3.6E-17	5.3E-17	< 1.0

3rd Quarter					4th Quarter				
					Section 30 West VH6				
Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit	Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit
U-nat	4.3E-17	1.5E-21	4.3E-17	< 1.0	U-nat	9.1E-18	7.3E-19	9.1E-18	< 1.0
Th-230	-2.6E-18	1.4E-17	2.2E-17	< 1.0	Th-230	-1.1E-17	2.0E-17	3.2E-17	< 1.0
Ra-226	1.8E-17	1.0E-17	1.1E-17	< 1.0	Ra-226	6.7E-18	5.4E-18	5.4E-18	< 1.0
Pb-210	1.2E-15	8.4E-17	1.4E-16	< 1.0	Pb-210	8.4E-16	8.5E-17	2.0E-16	< 1.0

High Volume Environmental Air Samples
2016

3rd Quarter					4th Quarter				
North Fence									
Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit	Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit
U-nat	1.0E-17	6.9E-23	1.0E-17	< 1.0	U-nat	2.9E-17	2.3E-18	1.5E-17	< 1.0
Th-230	4.5E-18	2.3E-17	3.2E-17	< 1.0	Th-230	-6.5E-18	2.6E-17	1.5E-17	< 1.0
Ra-226	2.4E-17	1.1E-17	1.7E-17	< 1.0	Ra-226	1.3E-17	2.6E-17	1.5E-17	< 1.0
Pb-210	1.8E-15	1.2E-16	2.1E-16	< 1.0	Pb-210	1.1E-15	1.5E-16	3.7E-16	< 1.0

3rd Quarter					4th Quarter				
KGL - North									
Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit	Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit
U-nat	2.5E-18	8.5E-23	2.5E-18	< 1.0	U-nat	3.0E-18	2.4E-19	3.0E-18	< 1.0
Th-230	1.8E-18	5.8E-18	6.7E-18	< 1.0	Th-230	-5.1E-18	1.2E-17	#VALUE!	< 1.0
Ra-226	5.5E-18	1.9E-18	1.8E-18	< 1.0	Ra-226	4.7E-18	2.4E-18	1.5E-18	< 1.0
Pb-210	1.1E-15	3.6E-17	4.4E-17	< 1.0	Pb-210	8.1E-16	3.3E-17	5.3E-17	< 1.0

3rd Quarter					4th Quarter				
KGL - South									
Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit	Nuclide	Conc. (uCi/ml)	Error (uCi/ml)	LLD (uCi/ml)	% Limit
U-nat	3.1E-18	1.3E-22	2.6E-18	< 1.0	U-nat	3.0E-18	2.4E-19	2.5E-18	< 1.0
Th-230	2.1E-18	6.5E-18	7.7E-18	< 1.0	Th-230	-3.2E-18	6.5E-18	9.6E-18	< 1.0
Ra-226	4.7E-18	2.5E-18	1.9E-18	< 1.0	Ra-226	4.1E-18	2.2E-18	1.3E-18	< 1.0
Pb-210	1.0E-15	4.3E-17	4.9E-17	< 1.0	Pb-210	8.8E-16	3.3E-17	5.3E-17	< 1.0