



Rio Algom

June 13, 2006

ADDRESSEE ONLY

William Von Till, Chief
Fuel Cycle Facilities Branch, NMSS
Mail Stop T-8A33
U.S. Nuclear Regulatory Commission
Washington, DC

**Subject: Ambrosia Lake Facility
License SUA-1473, Docket No. 40-8905
License Condition #22, Annual Surety Update**

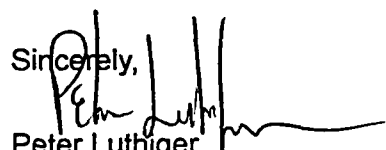
Dear Mr. Von Till:

Rio Algom Mining LLC submits the following 2006 annual surety update to the source material license referenced above and requests amendment of the current surety to reflect reclamation progress at the site.

Recent approvals from NRC have allowed Rio Algom to proceed and complete and/or discontinue some projects outlined within the current surety. The attached information lists the completed work units and a revised projected cost to complete site reclamation is provided.

Should you have any questions regarding this submittal, please contact me or Mr. Terry Fletcher at (505) 287-8851.

Sincerely,


Peter Luthiger
Manager, Radiation Safety
And Environmental Affairs

Attachment

xc: T. Fletcher
R. Lukes (NRC)
File

RIO ALGOM MINING LLC AMBROSIA LAKE FACILITY

License SUA-1473 Docket 40-8905



**2006
Surety Update**

June 16, 2006

Amendment Request to Reduce Approved Financial Surety Arrangement Ambrosia Lake Facility

Introduction

The Ambrosia Lake Site is a uranium recovery facility that is currently undergoing reclamation and decommissioning. The current status has the tailings areas entirely closed and the erosion protection in place. The mill is demolished with remaining structures being related to ongoing reclamation activities. The site obtained Alternate Concentration Limits in February 2006 (Amendment #56), which has allowed the initiation of further site reclamation that has been deferred pending ACL approval.

The site has completed significant cleanup of windblown tailings and is in the process of completing a soil cleanup verification plan that will address release criteria for the entire site. The site initiated the Lined Pond Closure Project (Amendment #55) and has relocated approximately 50% of the material from the Section 4 Ponds for disposal in Pond 2.

Recent approvals obtained from NRC have allowed Rio Algom to either complete additional work units or discontinue conducting various work units (e.g., groundwater corrective action plan). Completion or elimination of these work units, which are itemized in Table 1, result in a \$2 million reduction in the approved surety current established at \$26,703,452. Rio Algom requests that the current approved surety be modified to reflect this progress in site reclamation.

Completed Work Units

The following reclamation and decommissioning work units as outlined within the current approved surety documents have been completed or have been discontinued:

1. Pond 1
 - A. North Toe Trench – upper portion → completed in June 2005
 - B. North Toe Trench – lower portion → completed in June 2005
 - C. South Toe Trench → completed in November 2004
 - D. Northern Diversion Channel → completed in June 2005
 - E. Area Between Trenches → completed in November 2005

2. Groundwater

- A. Shaft Plugging Section 24 → completed in December 2004
- B. Ventilation Hole Plugging Section 24 → completed in January 2005
- C. Injection Hole Plugging Section 24 → completed in January 2005
- D. Surface Contour and Revegetation Section 24 → completed January 2005
- E. Pumping of Interceptor Trench → completed in February 2006
- F. Pumping of Evaporation Pond 9 to Section 4 → completed February 2006
- G. Mine Water Treatment Groundwater Sweep → complete February 2006

3. Section 4 Ponds

- A. Mobilization → completed in July 2005
- B. Highway Crossing → completed in November 2005

Rio Algom's January 31, 2005 submittal provided the detailed cost analysis for the individual work units to complete site closure which NRC approved as Amendment 54. The attached Table 2, which was included in the January 31, 2005 submittal, provides an update to these work units as described in Table 1.

Adjusting the current approved surety to reflect the completed work units results in a revised total surety estimate of \$23,990,178. Rio Algom requests that the surety estimate presently approved by NRC be amended to reflect this reclamation progress.

Table 1
RIO ALGOM MINING LLC - AMBROSIA LAKE OPERATION
2006 Annual Surety Update
Completed Work Units

	Itemized	Subtotal	Complete
Pond 1			
Rock cover between trenches	39919		November-05
Pond 1 - Northern diversion channel	67745		June-05
Pond 1 - North Toe Trench - upper portion	25544		June-05
Pond 1 - North Toe Trench - lower portion	26935		June-05
Pond 1 - South Toe Trench	291925		
Subtotal		452,068	
Groundwater			
Shaft Plugging - Section 24	6522		December-04
Ventilation hole Plugging - Section 24	9708		January-05
Injection hole plugging - Section 24	11058		January-05
Surface contour and revegetation - Section 24	38746		January-05
Pumping of Section 30West Mines	61080		February-06
Sampling and Analysis- bedrock	41400		
Pumping of Interceptor Trench	8612		February-06
Pumping of Evaporation pond 9 to Section 4	18796		February-06
Treatment of Mine Water used for Groundwater Sweep	54780		February-06
Sampling and Analysis - alluvium	12096		
Well Plugging and Abandonment	12450		
Subtotal		275,248	
Section 4 Ponds			
mobilization	1000000		July-05
highway crossing	403000		November-05
Removal and transport of materials to Pond 2	7500000		
removal of pipeline	6800		
Radiation Survey of Pond Areas	56927		
Soil Sampling of Pond Areas	10585		
Laboratory Analysis of soil samples	129104		
revegetation of section 4 area	230000		
Geotechnical testing (QA/QC) of placed materials at Pond 2	550000		
Cost to construct radon barrier	750000		
Pond 2 - Radon Flux tetsting of radon barrier	21825		
Cost to purchase and deliver erosion protection	649013		
Cost to place erosion protection	102600		
Subtotal		11,409,854	
	Total —>	2,064,370	

Table 2
RIO ALGOM MINING LLC - AMBROSIA LAKE OPERATION
FINANCIAL ASSURANCE COST ALLOCATION - June 2006

	Itemized	Subtotal
Pond 1		
Rock cover between trenches	0	
Pond 1 - Northern diversion channel	0	
Pond 1 - North Toe Trench - upper portion	0	
Pond 1 - North Toe Trench - lower portion	0	
Pond 1 - South Toe Trench	0	
Subtotal		0
Pond 2		
Erosion protection - north end	0	
Subtotal		0
Pond 3		
Pond 3 - Cover placement	610566	
Pond 3 - Geotechnical QA/QC	4790	
Geotechnician salary costs	6389	
Radiation surveys - radon flux measurements	21825	
Pond 3 - Rock Placement - top slope	56340	
Pond 3 - rock placement on slopes	135630	
Pond 3 - Pond 1 run-on apron rock placement	31386	
Pond 3 - toe trench rock placement	56654	
Subtotal		923,579
Unlined Ponds		
Pond perimeter work	994265	
Radiation Survey of Unlined Pond Areas and Pond 10	21123	
Revegetation of Unlined Pond Areas and Borrow areas	249700	
Subtotal		1,265,088
Mill Yard		
IX Demolition (includes tanks, pump house and water treatment building)	86270	
Shop Demolition (based on warehouse costs)	47622	
Admin. Office Demolition (includes changeroom) (based on warehouse)	47622	
Removal of PNM Substation	540000	
Soil clean-up and verification in mill yard	498343	
Radiation Surveys of mill yard	9521	
Soil Sampling Requirements for verification of clean-up	0	
Laboratory analysis costs	14226	
Placement of topsoil in mill yard	255544	
revegetation of mill yard	86900	
Mill Pond closure	325000	
Subtotal		1,911,048
Windblown Areas		
Cost to excavate and cover are N and E of Pond 1	238572	
Total cost to perform radiation surveys	50718	
Soil Sampling Requirements for verification of clean-up	0	
Laboratory analysis costs	99824	
Revegetation of windblown areas	609400	
Subtotal		998,514

Table 2
RIO ALGOM MINING LLC - AMBROSIA LAKE OPERATION
FINANCIAL ASSURANCE COST ALLOCATION - June 2006

	Itemized	Subtotal
Groundwater (analysis costs calculated through license termination - 2007)		
Shaft Plugging - Section 24	0	
Ventilation hole Plugging - Section 24	0	
Injection hole plugging - Section 24	0	
Surface contour and revegetation - Section 24	0	
Pumping of Section 30 West Mines	0	
Sampling and Analysis- bedrock	41400	
Pumping of Interceptor Trench	0	
Pumping of Evaporation pond 9 to Section 4	0	
Treatment of Mine Water used for Groundwater Sweep	0	
Sampling and Analysis - alluvium	12096	
Well Plugging and Abandonment	12450	
Subtotal		65,946
Intercept Trench Closure		
Cost to backfill trench - earthwork	1733120	
Trench - Geotechnical QA/QC	16030	
Geotechnician salary costs	78318	
Subtotal		1,827,468
Section 4 Ponds		
mobilization	0	
highway crossing	0	
Removal and transport of materials to Pond 2	7500000	
removal of pipeline	6800	
Radiation Survey of Pond Areas	56927	
Soil Sampling of Pond Areas	10585	
Laboratory Analysis of soil samples	129104	
revegetation of section 4 area	230000	
Geotechnical testing (QA/QC) of placed materials at Pond 2	550000	
Cost to construct radon barrier	750000	
Pond 2 - Radon Flux testing of radon barrier	21825	
Cost to purchase and deliver erosion protection	649013	
Cost to place erosion protection	102600	
Subtotal		10,006,854
Pond 9		
Total cost to relocate materials	312400	
Radiation surveys to verify remediation	3995	
Soil Sampling of Pond Areas	0	
Laboratory Analysis of soil samples	7203	
Revegetation of Pond Area	44000	
Subtotal		367,598

Table 2
RIO ALGOM MINING LLC - AMBROSIA LAKE OPERATION
FINANCIAL ASSURANCE COST ALLOCATION - June 2006

	Itemized	Subtotal
11e2 Disposal Area		
11e2 disposal cell closure	166012	
11e2 - Geotechnical QA/QC	1576	
Geotechnician salary costs	8191	
Radiation surveys - radon flux measurements	21825	
Purchase rock from quarry	28943	
Rock Placement - 11e2 cell	3590	
QA/QC on rock placement	256	
Subtotal		230,392
Total ---->		17,596,487

Site Management (3.9% - RSMeans)	686,263
Reclamation Cost	18,282,750
Overhead and Profit @ 10%	1,828,275
Long Term Surveillance and Monitoring Fee (\$250K in 1978 \$ adjusted)	750,000
Subtotal	20,861,025
Contingency (15% of all costs)	3,129,154
Total Reclamation Cost	23,990,178