

# Rio Algom Mining LLC

June 18, 2024

Thomas Lancaster  
United States Nuclear Regulatory Commission  
Mail Stop T5-A10  
Washington, DC 20555-0001

**Subject: 2024 Financial Assurance Update**  
Rio Algom Mining LLC – Ambrosia Lake West Mill  
Radioactive Materials License SUA-1473, Docket No. 40-8905

Dear Mr. Lancaster,

Rio Algom Mining LLC (RAML) respectfully submits its *2024 Financial Assurance Update* for the Ambrosia Lake West (ALW) mill as required by condition 22 of United States Nuclear Regulatory Commission (NRC) radioactive materials license SUA-1473. RAML's financial assurance update is consistent with [10 CFR 40, Appendix A](#), Criteria 9 and 10 and [NUREG-1620](#), Appendix C.

In 2021, NRC approved [Agencywide Documents Access and Management System Accession No. [ML22024A444](#)] an updated decommissioning scenario [[ML21181A169](#)] as the basis for RAML's annual financial assurance update at the ALW mill. Beginning in 2022, RAML's annual financial assurance updates have consisted of inflation-only adjustment to all costs associated with the approved 2021 decommissioning scenario.

For its 2024 update, RAML has again inflation-adjusted all costs associated with the approved 2021 decommissioning scenario. After inflation adjustment from 2021 to 2024, the cost remaining to complete decommissioning at the ALW mill is \$22,860,396. Details of RAML's inflation calculation are provided in the tables attached to this submittal.

The value of RAML's approved existing financial assurance instrument [\$23,000,000, ([ML24115A249](#))] exceeds the 2024 cost remaining to complete decommissioning at the ALW mill, and so no update to RAML's financial instrument or radioactive materials license is required for 2024.

If you have any questions regarding this letter, please contact me at 541-250-0519.

Sincerely,  
**Rio Algom Mining LLC**

Elizabeth Ruedig  
Superintendent New Mexico and Utah Sites

cc:	Document Control
Table 1	Summary of financial assurance elements consistent with <a href="#">NUREG-1620</a> , Appendix C
Table 2	Inflation adjustment
Table 3	Summary of all adjustments consistent with <a href="#">10 CFR 40, Appendix A</a> , Criterion 9(f)

Table 1. Summary of financial assurance elements consistent with [NUREG-1620](#), Appendix C

<b>NUREG 1620 Appendix C Section</b>	<b>2021 Financial Assurance Update Report Section</b>	<b>Cost</b>
(I) Facility Decommissioning	3(I)	\$ 8,514,309
(II) Ground-Water Cleanup and Well Decommissioning	3(II)	\$ 1,937,741
(III) Radiological Survey and Monitoring	3(III)	\$ 1,442,553
(IV) Project Manager Costs and Miscellaneous	3(IV)	\$ 4,383,950
(V) Labor and Equipment Overhead, Contractor Profit	3(V)	\$ -
(VI) Long-term Surveillance Fee	3(VI)	\$ 1,015,633
<b>(VII) Contingency</b>	<b>3(VII)</b>	<b>\$ 2,981,791</b>
<b>(VIII) Adjustments to Surety Amounts</b>	<b>3(VIII)</b>	<b>\$ 2,584,419</b>
	<b>TOTAL</b>	<b>\$ 22,860,396</b>

Blue text indicates values are the same as *2021 Financial Assurance Update* (ML21181A169)

Orange text indicates values changed from *2021 Financial Assurance Update*. The change in item (VIII) consists only of inflation adjustments from 2021-2024; item (VII) reflects a commensurate change in contingency as 15% of all other costs.

Table 2. Inflation adjustment

(VIII) Adjustments	Estimate Date	Estimate Date CPI	Jan 2024 CPI	Inflation	Original Amount	Inflated Amount	Notes	Adjustment Amount
(A) Adjustments for inflation								\$ 2,584,419
I (A) Salvageable building and equipment decontamination.					\$ -	\$ -		\$ -
I (B) Non-salvageable building and equipment demolition and disposal:					\$ -	\$ -		\$ -
I (C) Cleanup of contaminated areas	May 2021	269.195	308.417	1.15	\$ 8,514,309	\$ 9,754,853	Inflation adjustment May 2021 - January 2024	\$ 1,240,544
II (A) Method of Cleanup					\$ -	\$ -		\$ -
II (B) Volume of aquifer to be restored, area and thickness of aquifer, number of required pumping cycles, and cycling time					\$ -	\$ -		\$ -
II (C) Verification sample analysis	May 2021	269.195	308.417	1.15	\$ 1,754,049	\$ 2,009,616	Inflation adjustment May 2021 - January 2024	\$ 255,567
II (D) Well decommissioning	May 2021	269.195	308.417	1.15	\$ 183,692	\$ 210,456	Inflation adjustment May 2021 - January 2024	\$ 26,764
III (A) Soil samples for radium (and uranium and thorium, if needed) (e.g., number, cost to collect, and analyze)	May 2021	269.195	308.417	1.15	\$ 433,356	\$ 496,496	Inflation adjustment May 2021 - January 2024	\$ 63,140
III (B) Decommissioning equipment and building smear samples and alpha surface surveys	May 2021	269.195	308.417	1.15	\$ 36,564	\$ 41,892	Inflation adjustment May 2021 - January 2024	\$ 5,327
III (C) Gamma survey frequency, location, and techniques (e.g., type, number, unit cost)					\$ -	\$ -		\$ -
III (D) Environmental monitoring	May 2021	269.195	308.417	1.15	\$ 121,088	\$ 138,731	Inflation adjustment May 2021 - January 2024	\$ 17,643
III (E) Personnel monitoring	May 2021	269.195	308.417	1.15	\$ 851,545	\$ 975,616	Inflation adjustment May 2021 - January 2024	\$ 124,071
IV (A) Project management	May 2021	269.195	308.417	1.15	\$ 969,210	\$ 1,110,425	Inflation adjustment May 2021 - January 2024	\$ 141,215
IV (B) Engineering design, review, and change	May 2021	269.195	308.417	1.15	\$ 938,976	\$ 1,075,786	Inflation adjustment May 2021 - January 2024	\$ 136,810
IV (C) Mobilization	May 2021				\$ -	\$ -		\$ -
IV (D) Legal expenses	May 2021	269.195	308.417	1.15	\$ 220,000	\$ 252,054	Inflation adjustment May 2021 - January 2024	\$ 32,054
IV (E) Power during reclamation	May 2021	269.195	308.417	1.15	\$ 19,496	\$ 22,337	Inflation adjustment May 2021 - January 2024	\$ 2,841
IV (F) Quality control					\$ -	\$ -		\$ -
IV (G) Radiological safety					\$ -	\$ -		\$ -
IV (H) Construction completion report	May 2021	269.195	308.417	1.15	\$ 415,520	\$ 476,062	Inflation adjustment May 2021 - January 2024	\$ 60,542
IV (I) License termination activities	May 2021	269.195	308.417	1.15	\$ 91,500	\$ 104,832	Inflation adjustment May 2021 - January 2024	\$ 13,332
IV (J) Well maintenance & replacement					\$ -	\$ -		\$ -
IV (K) Other (describe):					\$ 1,729,248	\$ 2,045,839	Subtotal of IV (K)	\$ 316,591
National Environmental Policy Act	May 2020	256.394	308.417	1.20	\$ 380,000	\$ 457,103	Inflation adjustment May 2020 - January 2024	\$ 77,103
Section 106 compliance	May 2020	256.394	308.417	1.20	\$ 750,000	\$ 902,177	Inflation adjustment May 2020 - January 2024	\$ 152,177
Section 4 ponds Supplemental Characterization Work Plan	May 2021	269.195	308.417	1.15	\$ 124,316	\$ 142,429	Inflation adjustment May 2021 - January 2024	\$ 18,113
Operations & Maintenance Miscellaneous	May 2021	269.195	308.417	1.15	\$ 117,807	\$ 134,972	Inflation adjustment May 2021 - January 2024	\$ 17,165
Alternate concentration limit revision and licensing	May 2021	269.195	308.417	1.15	\$ 265,100	\$ 303,725	Inflation adjustment May 2021 - January 2024	\$ 38,625
Alternate release criteria area characterization and proposal	May 2021	269.195	308.417	1.15	\$ 92,025	\$ 105,434	Inflation adjustment May 2021 - January 2024	\$ 13,408
V Labor and Equipment Overhead, Contractor Profit					\$ -	\$ -		\$ -
VI Long-term surveillance fee	May 2021	269.195	308.417	1.15	\$ 1,015,633	\$ 1,163,611	Inflation adjustment	\$ 147,978
Purple cell indicates value was inflated from 2020								
Yellow cell indicates value was inflated from 2021								

Table 3. Summary of all adjustments consistent with [10 CFR 40, Appendix A](#), Criterion 9(f)

<b>Factors for Surety Adjustments</b>	<b>Comment</b>
(1) Inflation	All costs inflation-adjusted from 2021 estimate.
(2) Changes in engineering plans	No change since 2021 financial assurance calculation.
(3) Activities performed	No change since 2021 financial assurance calculation.
(4) Spills, leakage or migration of radioactive material producing additional contamination in onsite subsurface material that must be remediated to meet applicable remediation criteria	No change since 2019 financial assurance calculation.
(5) Waste inventory increasing above the amount previously estimated	No change since 2019 financial assurance calculation.
(6) Waste disposal costs increasing above the amount previously estimated	No change since 2019 financial assurance calculation.
(7) Facility modifications	No change since 2019 financial assurance calculation.
(8) Changes in authorized possession limits	No change since 2019 financial assurance calculation.
(9) Actual remediation costs that exceed the previous cost estimate	No change since 2021 financial assurance calculation.
(10) Onsite disposal	No change since 2021 financial assurance calculation.
(11) Any other conditions affecting costs	No change since 2021 financial assurance calculation.