

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
SUA-1473

Docket or Reference Number  
40-8905

Amendment No. 66

NRC FORM 374

U.S. NUCLEAR REGULATORY COMMISSION

**MATERIALS LICENSE**

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and the applicable parts of Title 10, Code of Federal Regulations, Chapter I, Parts 19, 20, 30, 31, 32, 33, 34, 35, 36, 39, 40, 51, 70, and 71, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	
1. Rio Algom Mining LLC	3. License Number SUA-1473, Amendment 66
2. P.O. Box 218 Grants, New Mexico 87020	4. Expiration Date Until terminated (Applicable Amendment 29)
	5. Docket No. 40-8905 Reference No.

6. Byproduct Source, and/or  
Special Nuclear Material

7. Chemical and/or Physical  
Form

8. Maximum amount that Licensee  
May Possess at Any One Time  
Under This License

Uranium

Any

Unlimited

9. Authorized Place of Use: The Licensee's Ambrosia Lake facility located in McKinley County, New Mexico.

10. The licensee shall maintain a radiation protection and environmental monitoring (RPEM) program as described within the submittal dated April 2022 (ML23088A157).

A. The RPEM program and all standard operating procedures (SOPs) shall be reviewed by the RSO annually to ensure that proper and current radiation protection principles are being applied. Revisions to the SOPs, if needed shall occur annually. Revisions to the RPEM program manual may only occur via a license amendment.

B. Written SOPs shall be established for all activities related to the closure of the facility involving radioactive materials that are handled, disposed of, or stored and all surveillance activities including environmental monitoring and radiation monitoring instrument calibration. SOPs shall specify radiation safety practices to be followed. Occupational exposure calculations shall be performed in accordance

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
SUA-1473Docket or Reference Number  
40-8905

Amendment No. 66

with Title 10 Code of Federal Regulations (10 CFR) Part 19.13(b) and 10 CFR Part 20 Subpart C and documented in accordance with 10 CFR Part 20.2106.

C. An up-to-date copy of each SOP shall be kept in the area to which it applies for reference.

D. Release of equipment or packages from the restricted area for unrestricted release or disposal shall be in accordance with the limits established in Enclosure 2 of Policy and Guidance Directive FC 83-23 "Guidelines for Decontamination for Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct or Source Materials" dated August 1987 (ML032170630).

E. The licensee shall designate a Radiation Safety Officer (RSO) who will be responsible for the establishment and maintenance of a facility radiation protection program including personnel and environmental monitoring programs. The RSO shall possess minimum qualifications as specified in Section 2.4.1 of Regulatory Guide 8.31 (ML021260630) as an alternative to the biennial refresher training requirement the RSO may maintain a Certified Health Physicist credential through the American Board of Health Physics.

**F. Change, Test, and Experiment License Condition**

1. The licensee may, without obtaining a license amendment pursuant to 10 CFR 40.44, and subject to conditions specified in (2) of this condition:

- a. Make changes to the facility as described in the license or license application (as modified and amended);
- b. Make changes to the procedures as described in the license or license application (as modified or amended); and
- c. Conduct tests or experiments not described in the license or license application (as modified or amended).

2. The licensee shall obtain a license amendment pursuant to 10 CFR 40.44 prior to implementing a proposed change, test, or experiment if the change, test, or experiment would:

- a. Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the license or license application (as modified or amended);
- b. Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a facility structure, equipment, or monitoring system (SEMS) important to safety previously evaluated in the license or license application (as modified or amended);
- c. Result in a more than minimal increase in the consequences of an accident previously evaluated in the license or license application (as modified or amended);

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
SUA-1473

Docket or Reference Number  
40-8905

Amendment No. 66

- d. Result in more than a minimal increase in the consequences of a malfunction of a SEMS previously evaluated in the license or license application (as modified or amended);
- e. Create a possibility for an accident of a different type than any previously evaluated in the license or license application (as modified or amended);
- f. Create a possibility for a malfunction of a SEMS with a different result than previously evaluated in the license or license application (as modified or amended);
- g. Result in a departure from the method of evaluation described in the license or license application (as modified or amended) used in establishing the facility safety evaluation report (SER), environmental impact statement (EIS), environmental assessment (EA) or technical evaluation reports (TERs) or other analysis and evaluations for license amendments;
- h. For purposes of this paragraph as applied to this license, SEMS means any SEMS that has been referenced in a staff SER, TER, EA, or EIS and supplements and amendments thereof.
3. Additionally, the licensee must obtain a license amendment unless the change, test, or experiment is consistent with the NRC staff's previous conclusions, or the basis of, or analysis leading to those conclusions, regarding actions, designs, or design configurations analyzed and selected in the site or facility SER, TER, and EIS or EA. This includes all supplements and amendments to the license, as well as all SERs, TERs, EAs, and EISs associated with amendments to this license.
4. The licensee's determinations concerning (2) and (3) of this condition shall be made by a Safety and Environmental Review Panel (SERP). The SERP shall consist of a minimum of three individuals. One member of the SERP shall have expertise in management (e.g., a Project Manager) and shall be responsible for financial approval for changes; one member (e.g., Decommissioning Site Manager) shall have expertise in decommissioning activities and site characteristics and conditions and shall have responsibility for implementing any day-to-day onsite decommissioning activities including changes to schedules or priorities; and one member shall be the radiation safety officer (RSO) or equivalent, with the responsibility of ensuring changes conform to radiation safety and environmental requirements. Additional members may be included in the SERP, as appropriate, to address technical aspects such as groundwater or surface water hydrology, specific earth sciences, and other technical disciplines. Temporary members or permanent members, other than the three above-specified individuals, may be consultants. However, if a permanent member is a consultant for the licensee, additional requirements must be met. A consultant serving as an RSO must meet the training and qualification requirements specified in this license. Except for the RSO, the approval of the NRC is required before a consultant may be appointed as a permanent member to the SERP.
5. The licensee shall maintain records of any changes made pursuant to this condition until license termination. These records shall include written safety and environmental evaluations made by the SERP that provide the basis for determining changes are in compliance with (2) of this condition. The licensee shall furnish, in an annual report to the NRC, a description of such changes, tests, or experiments, including a summary of the safety and environmental evaluation of each. In addition, the

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
SUA-1473

Docket or Reference Number  
40-8905

Amendment No. 66

licensee shall annually submit to the NRC changed pages, which shall include both a change indicator for the area changed (e.g., a bold line vertically drawn in the margin adjacent to the portion actually changed) and a page change identification (date of change, change number, or both) for the operations plan and reclamation plan of the approved license application that reflects changes made under this condition.

[Applicable amendments 4, 10, 11, 21, 28, 40, 52, and 64]

11. [DELETED by Amendment 64]
12. The licensee is authorized to possess byproduct material in the form of uranium process tailings and other byproduct wastes generated by the licensee's uranium processing operations. Mill tailings, other than small samples for purposes such as research or analysis, shall not be transferred from the restricted area without prior approval of the NRC in the form of a license amendment.
13. [DELETED by Amendment 62]
14. [DELETED by Amendment 64]
15. The licensee shall be required to use a Radiation Work Permit (RWP) for all work where the potential for significant exposure to licensed radioactive material exists and for which no SOPs exist. All RWPs shall be approved by the RSO, or a designee qualified by way of specialized radiation protection training. The RWP shall describe the following:
- A. The scope of the work to be performed,
  - B. Any precautions necessary to reduce exposures to radioactive materials, and
  - C. Supplemental monitoring required prior to, during, and after the completion of the work.
- [Applicable Amendment: 62]
16. [DELETED by Amendment 64].
17. [DELETED by Amendment 64]
18. [DELETED by Amendment 4]
19. The results of all effluent and environmental monitoring required by this license shall be reported semiannually and in accordance with 10 CFR 40.65, with copies of the report sent to the NRC. The information included in the environmental report shall follow that provided in Regulatory Guide 4.14 Rev 1 Table 3 as is applicable to the site conditions present during the reporting period.

[Applicable Amendments: 25, 52, 64]

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
SUA-1473

Docket or Reference Number  
40-8905

Amendment No. 66

20. The results of sample analyses, monitoring surveys, equipment calibration, reports of audits and inspections, meetings, and training sessions required by applicable regulations, or this license and any subsequent reviews, investigations, and corrective actions shall be documented. Unless otherwise specified in this license or in NRC regulations, all documentation shall be maintained for a period of five (5) years.
21. [DELETED by Amendment 52]
22. The licensee shall maintain an NRC-approved financial surety arrangement, consistent with 10 CFR 40, Appendix A, Criteria 9 and 10, adequate to cover the estimated costs, if accomplished by a third party, for decommissioning and decontamination of the mill and mill site, reclamation of any tailings or waste disposal areas, ground water restoration as warranted, and the long-term surveillance fee.
- Annual updates to the surety amount, required by 10 CFR 40, Appendix A, Criteria 9 and 10, shall be submitted to the NRC by June 30 of each year. Along with each proposed revision or annual update, the licensee shall submit supporting documentation showing a breakdown of the costs and the basis for the cost estimates with adjustments for inflation, maintenance of a minimum 15 percent contingency fee, changes in engineering plans, activities performed, and any other conditions affecting estimated costs for site closure. The basis for the cost estimate is the NRC-approved reclamation/decommissioning plan as supplemented by NRC-approved revisions to the plan. Annual updates should follow Appendix C to NUREG-1620, Rev. 1, "Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act of 1978."
- The licensee's currently approved surety, Irrevocable Letter of Credit issued by the Canadian Imperial Bank of Commerce, New York Branch, in favor of the NRC, shall be continuously maintained in an amount no less than \$24,000,000 for the purpose of complying with 10 CFR 40, Appendix A, Criteria 9 and 10, until a replacement is authorized by the NRC.
- [Applicable Amendments: 18, 19, 22, 24, 30, 32, 36, 39, 41, 46, 47, 48, 50, 52, 53, 54, 60, 62, 63, 66]
23. Prior to termination of this license, the licensee shall provide for transfer of title to byproduct material and land, including any interests therein (other than land owned by the United States or the State of New Mexico), which is used for the disposal of such byproduct material or is essential to ensure the long-term stability of such disposal site to the United States or the State of New Mexico, at the State's option.
24. [DELETED by Amendment 60]
25. [DELETED by Amendment 64]
26. [DELETED by Amendment 64]]
27. [DELETED by Amendment 52]
28. The licensee is hereby exempted from the posting requirements of 10 CFR 20.1902(e) for areas within the mill provided that all entrances to the mill are conspicuously posted in accordance with 10 CFR 20.1902(e) and with the words, "Any area within this mill may contain radioactive material."

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
SUA-1473

Docket or Reference Number  
40-8905

Amendment No. 66

29. [DELETED by Amendment 62]
30. [DELETED by Amendment 60]
31. [DELETED by Amendment 52]
32. The licensee is authorized to dispose of and bury contaminated waste materials resulting from past milling operations into the disposal areas in accordance with the submittal dated July 20, 1995. The licensee may also dispose of and bury within these areas, byproduct materials as authorized by License Condition 41. In addition, the licensee shall adhere to the following requirements.
- A. The licensee shall maintain detailed disposal records indicating quantities and locations of all waste material disposed in the disposal areas.
  - B. Prior to the disposal of any wastes, the licensee shall establish a detailed procedure to describe the handling, preparation, placement and covering of wastes in the specified disposal areas.
  - C. The final design of the disposal areas, including drawings, calculations, analyses, and a list of materials included in the disposal areas, will be submitted to the NRC for approval prior to placement of the final cover.
  - D. The licensee shall follow the approved soil decommissioning plan dated May 1, 2006 (ML18166A182), and additional information in transmittals dated June 15, 2005 (ML052060155), July 15, 2005 (ML052090175), September 26, 2005 (ML053000439), and July 25, 2006 (ML062080439).
- [Applicable Amendments: 6, 33, 37, 57, 61, 62]
33. [DELETED by Amendment 52]
34. The licensee shall implement a groundwater compliance monitoring program. The monitoring wells presented in Paragraph A of this License Condition shall be sampled quarterly for the first two years if a replacement well is installed or following approval of the alternate concentration limits contained in Paragraph B of this License Condition. The licensee shall sample the aforementioned monitoring wells semiannually thereafter, until license termination. Wells in the monitoring network that have been replaced are designated with an "R" after the original name. The ground water compliance monitoring program shall consist of the following:
- A. Sample Dakota Sandstone wells 17-01 KD, 30-02 KD, 30-48 KD-R, 32-45 KD-R, 36-07 KD, and 5-02 KD for antimony, arsenic, beryllium, cadmium, chloride, cyanide, lead, lead-210, molybdenum, nickel, nitrate, radium-226 & -228, selenium, sulfate, thorium-230, total dissolved solids, natural uranium, pH, electrical conductivity, and water level.
- Sample Tres Hermanos A wells 31-01 TRA-R, 30-01 TRA, & 33-01 TRA for chloride, cyanide, lead-210, molybdenum, nickel, nitrate, radium-226 & -228, selenium, sulfate, thorium-230, total dissolved solids, natural uranium, pH, electrical conductivity, and water level.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
SUA-1473

Docket or Reference Number  
40-8905

Amendment No. 66

Sample Tres Hermanos B wells 19-77 TRB, 31-02 TRB-R, 31-67 TRB, 36-01 TRB, and 36-02 TRB for chloride cyanide, lead-210, molybdenum, nickel, nitrate, radium-226 & -228 selenium, sulfate, thorium-230, total dissolved solids, natural uranium, pH, electrical conductivity, and water level.

Sample alluvium wells 5-03 ALL-R, 5-04 ALL-R, 5-08 ALL-R, 5-73 ALL-R, 32-59 ALL, 31-61 ALL, 31-65 ALL, and MW-24 ALL, for chloride, lead-210, molybdenum, nickel, nitrate, radium-226 & -228, selenium, sulfate, thorium-230, total dissolved solids, natural uranium, pH, electrical conductivity, and water levels.

- B. Comply with the following ground water protection standards at Dakota Sandstone compliance wells 30-02 KD (old POC), 30-48 KD-R, 5-02 KD, 32-45 KD-R, and 36-07 KD: antimony = 0.05 mg/l; arsenic = 0.1 mg/l, beryllium = 0.01 mg/l; cadmium = 0.01 mg/l; cyanide = 0.04 mg/l; lead = 0.14 mg/l; molybdenum = 0.06 mg/l; and selenium = 0.04 mg/l. Comply with the following alternate concentration limits at the same compliance wells: lead-210 = 62 pCi/l; nickel = 6.8 mg/l; radium-226 & -228 = 218 pCi/l; natural uranium = 1.6 mg/l; thorium-230 = 945 pCi/l; chloride = 3,200 mg/l; nitrate (as N) = 22.8 mg/l; sulfate = 6,480 mg/l; total dissolved solids = 14,100 mg/l. The lead-210 compliance limit is lowered to account for polonium-210 unless or until a compliance limit is developed and approved for polonium-210, at which time lead-210 reverts back to 88 pCi/l. Background is recognized at well 17-01 KD. Comply with the following ground water protection standards at Tres Hermanos A compliance wells 31-01 TRA-R (old POC) and 30-01 TRA: cyanide = 0.01 mg/l; molybdenum = 0.03 mg/l; nickel = 0.05 mg/l; selenium = 0.03 mg/l; and natural uranium = 0.01 mg/l. Comply with the following alternate concentration limits at the same compliance wells: lead-210 = 62 pCi/l; radium-226 & -228 = 218 pCi/l; thorium-230 = 945 pCi/l; chloride = 1,070 mg/l; nitrate (as N) = 9.2 mg/l; sulfate = 2,584 mg/l; total dissolved solids = 6,400 mg/l. The lead-210 compliance limit is lowered to account for polonium-210 unless or until a compliance limit is developed and approved for polonium-210, at which time lead-210 reverts back to 88 pCi/l. Background is recognized as well 33-01 TRA.

Comply with the following ground water protection standards at Tres Hermanos B compliance wells, 31-02 TRB-R, 31-67 TRB, 36-01 TRB, and 36-02 TRB: cyanide = 0.01 mg/l; molybdenum = 0.08 mg/l; and selenium = 0.04 mg/l. Comply with the following alternate concentration limits at the same compliance wells: nickel = 6.8 mg/l; radium-226 & -228 = 218 pCi/l; natural uranium = 1.6 mg/l; thorium-230 = 945 pCi/l; lead-210 = 62 pCi/l; chloride = 2,810 mg/l; nitrate (as N) = 7.7 mg/l; sulfate = 4,760 mg/l; and total dissolved solids = 11,700 mg/l. The lead-210 compliance limit is lowered to account for polonium-210 unless or until a compliance limit is developed and approved for polonium-210, at which time lead-210 reverts back to 88 pCi/l. Background is recognized as well 19-77 TRB.

Comply with the following alternate concentration limits at alluvium compliance wells 32-59 ALL, 31-61 ALL, 31-65 ALL, MW-24 ALL, 5-04 ALL-R, 5-08 ALL-R, and 5-73 ALL-R: molybdenum = 176 mg/l; nickel = 98 mg/l; selenium = 49 mg/l; radium-226 & -228 = 3,167 pCi/l; thorium-230 = 13,627 pCi/l; natural uranium = 23 mg/l; lead-210 = 891 pCi/l, chloride = 7,110 mg/l; nitrate (as N) = 351 mg/l; sulfate = 12,000 mg/l; total dissolved solids = 26,100 mg/l. The lead-210 compliance limit is lowered to account for polonium-210 unless or until a compliance limit is developed and approved

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
SUA-1473

Docket or Reference Number  
40-8905

Amendment No. 66

for polonium-210, at which time lead-210 reverts back to 1,274 pCi/l. Background is recognized as well 5-03 ALL-R.

Alternate concentration limits were specified in the technical evaluation report dated February 26, 2006 (ML060380387).

- C. [DELETED by Amendment 56]
- D. Submit, by February 1 and August 1 of each year ground water monitoring reports to include a minimum of the following: potentiometric surface maps for each aquifer; time vs. concentration plots for all parameters for which ACLs have been issued, hydrographs for the downgradient most trend well or POE well in each aquifer, hydraulic gradient calculations, and tabulated analytical data for each ACL parameter for each well.
- E. [DELETED by Amendment 42]
- F. If the laboratory results indicate that the concentration of any constituent exceeds its associated ground water protection standard or ACL, the licensee shall collect a second sample within 7 calendar days of becoming aware of the aforementioned exceedance. If the results of this second sample confirm the aforementioned exceedance, the licensee shall increase the monitoring frequency to monthly and submit to NRC staff quarterly reports documenting the exceedance. If the exceedances continue for three consecutive months, the licensee shall submit to NRC staff a ground water corrective action designed to regain compliance with ground water protection standards and ACLs.
- G. The Licensee shall submit a TRA groundwater evaluation report by December 31, 2026, reassessing the groundwater conditions at well 36-08 TRA to address the extent and fate of the plume, or a proposed path forward to resolve uncertainties of plume extent and fate. The sampling shall continue on a semi-annual basis for the Tres Hermanos A constituents in License Condition 34. Data will be reported in the Licensee's semi-annual reports (License Condition 34.D) until the TRA groundwater evaluation report is submitted. Related RAML documents are the submittals dated February 28, 2023 [ML23060A111] and December 20, 2024 [ML24362A138]. Related NRC evaluations are dated June 1, 2023 [ML23068A463] and April 10, 2026 [ML26099A040].

[Applicable Amendments: 9, 11, 13, 15, 25, 35, 40, 42, 56, 62, 64, 66]

35. [DELETED by Amendment 52]
36. [DELETED by Amendment 62]
37. [DELETED by Amendment 62]
38. [DELETED BY Amendment 52]
39. The licensee shall conduct an annual survey of land use (grazing, residences, water supply wells, etc.) in the area within two miles of the mill and submit a report of this survey annually to the NRC. This report

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
SUA-1473Docket or Reference Number  
40-8905

Amendment No. 66

shall indicate any differences in land use from that described in the licensee's previous annual report and shall specifically address occupancy of the Berryhill Ranch. The report shall be submitted by July 1 of each year.

[Applicable Amendment: 21]

40. [DELETED by Amendment 62]

41. In accordance with the licensee's submittals dated November 20, 1995 (ML16148A891), May 9, 1996, January 24, 1997, and February 13, 1997, the licensee is hereby authorized to dispose of 11e.(2) byproduct materials that are similar in physical, chemical, and radiological characteristics to the 11e.(2) byproduct material and associated wastes already within the impoundment subject to the following:

A. Prior to the receipt of any material under this condition, the licensee shall provide an analysis of the costs of reclamation based on the disposal of the amount of byproduct authorized by this condition on a five (5) year forward basis and include that analysis into the annual surety update required by License Condition 22.

[Applicable Amendments: 37, 44]

B. [DELETED by Amendment 44]

C. Total annual receipt and disposal of 11e.(2) byproduct material shall not exceed 100,000 cubic yards (76,500 m<sup>3</sup>) from all generators.

D. The total 11e.(2) byproduct material to be disposed of from all generators is limited to 5.3 million tons (3.8 million yds<sup>3</sup>).

E. Average annual Ra-226 concentrations of disposed material shall not exceed 1100 pCi/g (41 Bq/g) from any generator.

F. All contaminated equipment shall be dismantled, crushed, perforated or placed to minimize void spaces. Barrels shall be verified to be full prior to disposal. Barrels not completely full shall be filled or emptied and crushed prior to final disposal.

G. Byproduct material shall be free of standing liquids.

H. All disposal activities shall be documented. The documentation shall include a description of the byproduct material, the disposal locations, and the results of pre-acceptance testing. The licensee shall maintain documentation until license termination.

I. The licensee shall submit a final reclamation report upon the end of receipt operations.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
SUA-1473Docket or Reference Number  
40-8905

Amendment No. 66

42. The licensee shall consolidate and transport evaporation pond materials and any associated soils impacted by milling related byproduct materials from the Section 4 Ponds and Pond 9 in accordance with Sections 4 and 5 of the Relocation Plan for Lined Evaporation Ponds, Rev. 0.1, submitted by letter dated January 28, 2005 (ML050820597).
- [Applicable Amendment: 55]
43. [DELETED by Amendment 62]



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
SUA-1473

Docket or Reference Number  
40-8905

Amendment No. 66

FOR THE NUCLEAR REGULATORY COMMISSION

Dated: June 10, 2026

Signed by Spore, Candace  
on 06/10/26

Candace (Eagle Plume Woman) Spore  
Uranium Recovery and Materials  
Decommissioning Branch  
Division of Decommissioning, Uranium Recovery  
and Waste Programs  
Office of Nuclear Material Safety  
and Safeguards

