

MATERIALS LICENSE

Amendment No. 5

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 licensee 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		3. License Number	SMB-1393 is amended In its entirety to read as follows:
1. Molycorp, Inc.		4. Expiration Date	Until terminated
2. 1201 West 5 th Street, P.O. Box 54945 Los Angeles, California 90054		5. Docket or Reference	040-08778
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	

A. Natural Thorium	A. Slags and Contaminated Soils and Building Components	A. 18 x 10 ³ kg
B. Natural Uranium	B. Slags and Contaminated Soils and Building Components	B. 218 kg

9. Authorized Use:

A. For storage, transfer, and decommissioning in accordance with an approved Site Decommissioning Plan.

CONDITIONS

10. Licensed material shall be stored only at the licensee's facilities located at Caldwell and Green Streets, Washington, Pennsylvania.
11. The licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions, and Reports to Workers; Inspections and Investigations," and Part 20, "Standards for Protection Against Radiation."
12. Licensed material shall be used by, or under the supervision of George W. Dawes.
13. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, and 8 of this license in accordance with statements, representations, and procedures contained in letters dated November 27, 1973, and January 30, 1974, application dated December 26, 1974, and letters dated July 13, 1976, July 11, 1980, November 19, 1980, August 19, 1992, September 21, 1992, and September 25, 1992. The Nuclear Regulatory Commission's regulations shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.

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14. Submittal of Site Decommissioning Plan (SDP) - Molycorp, Inc., will submit a SDP to the NRC no later than July 16, 2000. If on site disposal of radioactive waste under the conditions of restricted use is proposed, an environmental report will be submitted by the same date. The SDP will include a decommissioning funding plan (DFP), in accordance with 10 CFR 40.36(a), to cover the estimated cost for the preferred decommissioning approach. The licensee is hereby granted a schedular exemption from the requirement of 10 CFR 40.36(c)(2) for the submittal of a DFP until such time as the SDP is submitted.
15. Pursuant to 10 CFR 20.1401(b) and 40.42(g)(5), the licensee is authorized to decommission those portions of its facility currently contaminated with radioactive material in accordance with the unrestricted release criteria approved by the Commission in the Site Decommissioning Management Plan Action Plan of April 6, 1992, (57 FR 13389). Except as specifically provided otherwise in this license, the licensee shall conduct its decommissioning in accordance with the statements, representations, and procedures contained in: (1) the license application and decommissioning plan dated June 30, 1999; (2) Molycorp's letter to NRC (Larry Camper) dated April 3, 2000; and (3) Molycorp's letter to NRC (LeRoy Person) dated May 16, 2000.

The NRC's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive.

- A. Prior to excavation of contamination, Molycorp, Inc., shall submit to NRC for review and approval a supplemental characterization and monitoring plan for groundwater, surface water, and sediments. The plan will provide the following information:
1. Radiological characterization of the bedrock unit near the western boundary of the site prior to and after, excavation, sufficient to provide evidence that contamination is not migrating off site in the bedrock unit;
 2. Updated groundwater, surface water, and sediment monitoring data from previously sampled locations prior to and after excavation, sufficient to establish radiological trends for thorium and uranium and their significant daughter products and to provide assurance that post excavation contamination levels are within acceptable limits; and
 3. The planned extent of excavation below the water table and control measures (e.g., engineering controls, waste water management plans, and contamination controls) that will be used to limit migration of radiological contamination. Similar information shall be provided for non-radiological contamination if such contamination is mixed with the radiological contaminants.
- B. Prior to excavation of contamination, Molycorp, Inc., shall submit a detailed supplemental characterization plan for NRC review and approval. The supplemental characterization plan should include information from site surveys that establish the equilibrium status of uranium-238, thorium-232, and their daughter products at the Washington site. In the event a total uranium/thorium ratio approach is proposed for estimating total uranium concentration for demonstrating compliance with the unrestricted release criteria, then the survey plan must include the following:
1. Site specific information that supports the uranium to thorium ratio;

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2. Survey results that demonstrate the U:Th ratios across the site are reasonably homogenous or the applicability of all U:Th ratios to specific survey locations across the site; and
3. Detailed information on survey protocols, instrumentation, and proposed analysis methodologies (e.g., statistics, inferences, and application of sum-of-ratios rule) for survey results that will be necessary to demonstrate compliance with unrestricted release criteria.

If Molycorp, Inc., cannot justify the application of a U:Th ratio approach, then appropriate laboratory techniques should be used to measure uranium concentration in soils directly.

- C. Molycorp, Inc., shall ensure that any soils designated as affected that exist underneath buildings and structures or outside the facility fence will be subject to the same remediation and final survey methods used for affected open land areas;
- D. Prior to conducting any approved decommissioning operations on the Washington site, Molycorp, Inc., shall submit to NRC for review and approval a final set of radiation protection procedures that address compliance with all applicable 10 CFR Part 20 requirements for protection of workers and the public from potential radiological hazards resulting from those decommissioning activities;
- E. One week prior to beginning excavation, Molycorp shall inform U.S. Nuclear Regulatory Commission, Region 1 (King of Prussia Office) and the Division of Waste Management; and
- F. Molycorp is authorized to transfer low-level radioactive waste offsite for disposal at a licensed low-level radioactive waste disposal facility. On site disposal is not authorized by this amendment.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Dated: _____

By: _____

Larry W. Camper, Chief
Decommissioning Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

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FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Dated: August 8, 2000By: IRA/

Larry W. Camper, Chief
Decommissioning Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

