DCS/DF02

NRC FORM 7
(1-89)
10 CFR 110

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB
3150-0027
EXPIRES 12-31-90

APPLICATION FOR LICENSE TO EXPORT NUCLEAR MATERIAL AND EQUIPMENT *(See Instructions on Reverse)*

1. APPLICANT'S USE	a. DATE OF APPLICATION	b. APPLICANT'S REFERENCE	2. NRC USE	a. DOCKET NO.	b. LICENSE NO.
	June 13, 1991			11004576	XSOU8708

3. APPLICANT'S NAME AND ADDRESS	RIS	4. SUPPLIER'S NAME AND ADDRESS *(Complete if applicant is not supplier of material)*	RIS
a. NAME: Molycorp, Inc.		See letter dated June 13, 1991	
b. STREET ADDRESS: 1201 W. Fifth Street		a. NAME	
c. CITY: Los Angeles; STATE: CA; ZIP CODE: 90017		b. STREET ADDRESS	
d. TELEPHONE NUMBER *(Area Code – Number – Extension)*: 213-977-5166		c. CITY; STATE; ZIP CODE	

5. FIRST SHIPMENT SCHEDULED	6. FINAL SHIPMENT SCHEDULED	7. APPLICANT'S CONTRACTUAL DELIVERY DATE	8. PROPOSED LICENSE EXPIRATION DATE	9. U.S. DEPARTMENT OF ENERGY CONTRACT NO. *(If Known)*
As soon as license issued	Ten Years	As Required	10 Years	Not Applicable

10. ULTIMATE CONSIGNEE	RIS	11. ULTIMATE END USE *(Include plant or facility name)*
a. NAME: Various - See letter dated June 13, 1991		Rare Earths (lanthanides) have over 150 commercial applications including glass polishing compounds, catalysts, steel, magnets and television phosphors. Thorium and uranium are impurities.
b. STREET ADDRESS		11a. EST. DATE OF FIRST USE
c. CITY – STATE – COUNTRY		

12. INTERMEDIATE CONSIGNEE	RIS	13. INTERMEDIATE END USE
a. NAME: Various		Molycorp manufactures and sells products to foreign and domestic manufacturers in many different industries from its rare earth processing facilities.
b. STREET ADDRESS		13a. EST. DATE OF FIRST USE
c. CITY – STATE – COUNTRY		

14. INTERMEDIATE CONSIGNEE	RIS	15. INTERMEDIATE END USE
a. NAME: Not Applicable		Not Applicable
b. STREET ADDRESS		15a. EST. DATE OF FIRST USE
c. CITY – STATE – COUNTRY		

16. NRC USE	17. DESCRIPTION *(Include chemical and physical form of nuclear material, give dollar value of nuclear equipment and components)*	18. MAX. ELEMENT WEIGHT	19. MAX. WT. %	20. MAX. ISOTOPE WEIGHT	21. UNIT
	Natural thorium/uranium (in concentrates ranging from 0.05 percent to 1.0 percent) contained as contaminants in rare earth products.	9,500 kilograms	1.0	Natural Thorium/ Uranium	N/A

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22. COUNTRY OF ORIGIN – SOURCE MATERIAL	23. COUNTRY OF ORIGIN – SNM WHERE ENRICHED OR PRODUCED	24. COUNTRIES WHICH ATTACH SAFEGUARDS *(If Known)*
USA	USA	Unknown

25. ADDITIONAL INFORMATION *(Use separate sheet if necessary)*
This request is for issuance of specific license authorizing export of the materials in description 17 to all countries except Cuba, Kampuchea, North Korea and Vietnam. Additional information in letter dated June 13, 1991. Replaces NRC export license XT08552.

26. The applicant certifies that this application is prepared in conformity with Title 10, Code of Federal Regulations, and that all information in this application is correct to the best of his/her knowledge.

27. AUTHORIZED OFFICIAL	a. SIGNATURE	b. TITLE
Edmund C. Barnum		Manager, Technical Services

NRC FORM 7 (1-89)

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Molycorp, Inc.
A Unocal Company
1201 West 5th Street, P.O. Box 54945
Los Angeles, California 90054
Telephone (213) 977-5166
Facsimile (213) 977-7778

nrc.exp

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Edmund C. Barnum
Manager, Technical Services

June 13, 1991

Ms. Betty L. Wright
Export/Import Licensing Officer
Office of International Programs
United States Nuclear Regulatory Commission
Washington, D. C. 20555
Tel. No. 301-492-0342
Fax. No. 301-492-0395

Dear Ms. Wright,

Request for Export Licenses

Attached are Molycorp's requests for two specific licenses authorizing export of lanthanide (rare earth) products containing up to 1.0% weight thorium and/or uranium. The applications have been filed on NRC Form 7 in accordance with Part 110 of Title 10, Chapter 1, Code of Federal Regulations-Energy.

The first request is for a specific license for 2 0,000 kilograms and would be replacing the current license XT08558. Countries to be covered would include Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Mexico, Netherlands, Norway, South Korea, Spain, Sweden, Switzerland, Taiwan, and United Kingdom. Our previous license which expires in December, 1992, and does not include Taiwan and South Korea, was issued for 100,000 kilograms. Currently, Molycorp has shipped over 82,000 kilograms of thorium impurities under this license that was issued November 23, 1982.

The second request is for a specific license for 9,500 kilograms to cover all countries except Cuba, Kampuchea, North Korea, and Vietnam. This license would replace XT08552 that was amended November 23, 1982 and issued for 9,500 kilograms. Molycorp currently exports material to South Korea and Taiwan under this license and it is primarily the increased shipments to these two countries that has filled the limit for this license. Other countries that we have shipped to under this license are Argentina, Brazil, Egypt, Hungary, and New Zealand.

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Molycorp, Inc., is a Unocal Company, headquartered in Los Angeles. Our Mountain Pass, California, deposit of bastnasite is the only commercial significant lanthanide deposit in the United States. Molycorp has lanthanide processing plants in Mountain Pass; Louviers, Colorado; York, Pennsylvania; and Washington, Pennsylvania. These licenses would permit shipments from all four plants. The addresses for the plants are as follows:

Molycorp, Inc.
Mountain Pass Mine
67750 Bailey Road at I-15
Mountain Pass, CA 92366
Tel. 619-856-2201

Molycorp, Inc.
Louviers Plant
P.O. Box 37
9481 N. Highway 85
Louviers, CO
Tel. No. 303-791-7600

Molycorp, Inc.
York Plant
350 N. Sherman Street
York, PA 17403
Tel. No. 717-84[illegible]-2624

Molycorp, Inc.
Washington Plant
300 Caldwell Avenue
Washington, PA 15301
Tel. No. 412-222-5605

Bastnasite is a primarily a lanthanide fluorocarbonate mineral. The Mountain Pass orebody also contains small amounts of monazite, primarily a lanthanide thorium phosphate. The predominate lanthanides are cerium, lanthanum, neodymium, and praseodymium.

Molycorp manufactures and sells a wide variety of individual and mixed lanthanides including oxides, carbonates, chlorides, hydrates, nitrates, oxalates, and fluorides. All of Molycorp's customers consider thorium to be an impurity and no further separation of the thorium is undertaken by our customers. Natural thorium is currently only present in three of our products. At Mountain Pass, Molycorp produces bastnasite concentrate with about 0.1% thorium and cerium concentrate with about 0.2% thorium. At York, a natural cerium fluoride product has about 0.5% thorium.

Natural uranium is also present in all three products but in quantities less than one-tenth of the thorium values in these products (i.e. 20-90 ppm in bastnasite concentrate).

The bastnasite and cerium concentrates are exported widely in container quantities. The cerium fluoride product has only been exported to Canada in small quantities. Our Mountain Pass facility does not have a source license as all materials are exempt from licensing requirements under Part 10 CFR 40.13 (c) (1) (vi) "rare earth metals and compounds, mixtures, and products containing not more than 0.25 percent by weight thorium, uranium, or and combination of these". Discussions are underway with the State of California which is an agreement state for a source/NORM license regarding process residues. The York plant has a NRC source license, SMB-1408. The Washington plant has a NRC source license, SMB-1392. The Louviers plant has license number 500-03 from the State of Colorado as Colorado is also an agreement state.

Lanthanides have over 150 commercial applications. Cerium and bastnasite concentrates are primarily used in glass polishing compounds, glass additives for CRT screens, and as feedstock for ferroalloys for iron and steel.

The Mountain Pass plant maintains a logbook recording the estimated amount of thorium in each export shipment of bastnasite and cerium concentrates. A cumulative total is calculated after each shipment for the appropriate license. This logbook is available for inspection by representatives of the NRC or the State of California.

Thank you again for your cooperation.

Sincerely,

Edmund C. Barnum