


NRC FORM 7 (07-2019) 10 CFR 110		U. S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB: NO. 3150-0027		EXPIRES: 02/28/2022	
		APPLICATION FOR NRC EXPORT OR IMPORT LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) <i>(See Instructions on Pages 4 and 5)</i>				Estimated burden per response to comply with this mandatory collection request: 2.4 hours. This submittal is reviewed to ensure that the applicable statutory, regulatory, and policy considerations are satisfied. Send comments regarding burden estimate to the Information Services Branch (T-6 A10M), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov , and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0027), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.	
PART A. FOR NRC USE ONLY		<input checked="" type="checkbox"/> Public OR <input type="checkbox"/> Non-Public		Date Received 11/29/21 JMS			
License Number XSOU8855		Docket Number 11006432		Adams Accession Number			
PART B. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, RENEWALS, OR CONSENT REQUESTS (If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)							
1. Name and Address of Applicant/Licensee MP Mine Operations LLC HC1 Box 224 67750 Bailey Road Mountain Pass, CA 92366 Attn: Steven Baker			1a. Name of Applicant's Contact Steven Baker		1b. Applicant's Reference Number 00001		
			1c. Office Telephone Number 702-540-2787		1d. Office Facsimile Telephone Number n/a		
			1e. Applicant's E-mail Address sbaker@mpmaterials.com				
2. Type of Action Requested (Check one)		<input checked="" type="checkbox"/> Export (Parts B, C, E)		<input type="checkbox"/> Amendment/Renewal		Current License Number:	
		<input type="checkbox"/> Import (Parts B, D, E)		<input type="checkbox"/> Consent Request (Parts B, C)		Current License Number:	
3. Contract Number(s)				4. First Shipment Date 02/01/2022		5. Last Shipment Date	
						6. Proposed Expiration Date 12/31/2032	
PART C. TO BE COMPLETED FOR EXPORT LICENSES, AMENDMENTS, OR RENEWALS (If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)							
7. Name(s)/Address(es) of U. S. Suppliers and/or other U. S. Parties to the Export NONE			8. Name(s)/Address(es) of Intermediate Foreign Consignee(s) NONE			9. Name(s)/Address(es) of Ultimate Foreign Consignee(s) People's Republic of China - the names and addresses of all the ultimate consignees are contained on page 3. (Non-nuclear end use - industrial and commercial use of rare earth minerals)	
7a. Function(s) Performed/Service(s) Provided NONE			8a. Intermediate Use(s) NONE			9a. Ultimate End Use(s) Non-nuclear end use - industrial and commercial use of rare earth minerals	
10. Description of Radioactive Materials, Sealed Sources, Nuclear Facilities, Equipment, or Components; for Nuclear Equipment include Total Dollar Value of Equipment for Export Natural thorium and uranium (in concentrations ranging from 0.05% to 1.0%) as contaminants in rare earth compounds and mixtures.				10a. Maximum Total Volume/Element WGT (KG), or Total Activity (TBq) 400,000 kilograms		10b. Max Enrichment or WGT% N/A - this only applies to special nuclear material, which MPMO does not produce or handle.	
						10c. Max Isotope WGT (KG) N/A - this only applies to special nuclear material, which MPMO does not produce or handle.	
11. Foreign origin (or obligations by country and, if known, by percentage of maximum total volume) N/A - All material to be exported under the proposed license will be produced at the Mountain Pass mine in California.							

NRC FORM 7
(07-2019)
10 CFR 110

U. S. NUCLEAR REGULATORY COMMISSION

**APPLICATION FOR NRC EXPORT OR IMPORT
LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)**

License Number XSOU8855	Docket Number 11006432	Adams Accession Number	<input checked="" type="checkbox"/> Public OR <input type="checkbox"/> Non-Public
-----------------------------------	----------------------------------	------------------------	--

PART D. TO BE COMPLETED FOR IMPORT LICENSES, AMENDMENTS, OR RENEWALS

(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

12. Name(s)/Address(es) of Foreign Suppliers and/or other Foreign Parties to Import	13. Name(s)/Address(es) of Foreign or U. S. Intermediate Consignee(s)	14. Name(s)/Address(es) of Ultimate U. S. Consignee(s)	
12a. NRC Export License Number(s) (if applicable)	13a. License Number(s) / Expiration Date(s)	14a. License Number(s) / Expiration Date(s)	
	13b. Intermediate Use(s)	14b. Ultimate End Use(s)	
15. Description of Radioactive Materials, Sealed Sources, Nuclear Facilities	15a. Maximum Total Volume/ Element WGT (KG), or Total Activity (TBq)	15b. Max Enrichment or WGT%	15c. Max Isotope WGT (KG)

16. Foreign obligations (By country and by Percentage of Maximum Total Volume)

PART E. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, RENEWALS OR CONSENT REQUEST(S)

(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

17. Additional Information provided on pages 3, 4, and/or separate sheets? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	17a. Copies of Recipient's Authorizations Provided? <input type="checkbox"/> Yes <input type="checkbox"/> No
---	---

18. Certification:

I, the applicant's authorized official, hereby certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, and that all information provided is correct to the best of my knowledge.

18a. Print Name and Title of Authorized Official <i>Steven Baker</i> Environmental, Health and Safety Manager	18b. Signature -- Authorized Official Steven Baker Digitally signed by Steven Baker Date: 2021.11.29 05:29:36 -08'00'	18c. Date
--	--	-----------

NRC FORM 7

(07-2019)
10 CFR 110

U. S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR NRC EXPORT OR IMPORT
LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)

License Number XSOU8855	Docket Number 11006432	Adams Accession Number	<input checked="" type="checkbox"/> Public OR <input type="checkbox"/> Non-Public
----------------------------	---------------------------	------------------------	--

Additional Information (Reference applicable block numbers from page 1 and/or page 2 for each entry)

MP Mine Operations LLC requests a license to export up to 400,000 kilograms of natural thorium and uranium (in concentrations ranging from 0.05% to 1.0%) as contaminants in rare earth compounds and mixtures. This will allow MP Mine Operations LLC to continue to fulfill orders without interruption for the next several years in order to secure the cash flow necessary to establish its own domestic rare earth processing capabilities, as part of its U.S. Government-supported mission to restore the full rare earth supply chain to the United States

With respect to exports to the People's Republic of China specifically, the consignees in the People's Republic of China are as follows:

- 1) Ningbo Ruiyu New Material Co., Ltd.
(宁波瑞昱新材料有限公司)
Room B195, Building 5, Zhongchuang Zone,
North of Binhai Si Road, Hangzhou Bay New Zone,
Ningbo, China
(浙江省宁波杭州湾新区滨海四路北侧众创园5号楼B195室)
- 2) Shenghe Resources (Hainan) International Trading Co., Ltd.
(盛和资源(海南)国际贸易有限公司)
Room 301, Unit 3, 199 Binjiang Xilu,
Qiongsan District, Haikou,
Hainan Province, China
(海南省海口市琼山区滨江街道办攀丹社区滨江西路199号3-301)
- 3) Guangxi Rare Rare Earth Trade Co. LTD.
(广西稀有稀土贸易有限公司广西稀有稀土贸易有限公司)
3rd Floor, No.8 East Industrial Avenue
Chongzuo City Industrial Zone, Guangxi, China
(广西崇左市城市工业区工业大道8号第3栋三楼)
- 4) Petromine (Shanghai) New Energy Technology Co., Ltd.
(彼得罗曼(上海)新能源科技有限公司)
Building No. 2-6, Lane 2098, Jinshajiang Road, 200333 Shanghai, China
(中国上海市普陀区金沙江路2098弄2—6号2楼)

November 23, 2021

VIA EMAIL

David.Skeen@nrc.gov

NRCForm7nrc.gov@usnrc.onmicrosoft.com

Mr. David Skeen
Deputy Director, Office of International Programs
U.S. Nuclear Regulatory Commission
Mailstop 14-A20
11555 Rockville Pike
Rockville, Maryland 20852

Re: Application for NRC Export License for MP Mine Operations LLC
EXPEDITED REVIEW REQUESTED

Dear Mr. Skeen:

MP Mine Operations LLC (“MPMO”) is submitting the enclosed application (“Application”) to the U.S. Nuclear Regulatory Commission (“NRC”) for a license to export up to 400,000 kilograms of identified materials to specific consignees in China. MPMO requests expedited review of this Application to allow it to continue to fulfill important orders without interruption. These orders are essential to MPMO’s ability to secure the cash flow necessary to establish its own domestic rare earth processing capabilities, as part of its U.S. Government-supported mission to restore the full rare earth supply chain to the United States. (MPMO has been exporting these same materials pursuant to its existing NRC Export License No. XSOU8707.)

How the Grant of the Application Would Support U.S. National Security Objectives

MPMO owns and operates Mountain Pass mine, located in the unincorporated community of Mountain Pass in San Bernardino County, California. Mountain Pass is the only integrated rare earth mining and processing site in the Western Hemisphere and one of the largest in the world. MPMO’s products are essential to the high-tech economy generally and to U.S. national security in particular. Rare earth metals are critical components in hundreds of existing and emerging applications that power the modern economy, including hybrid and electric vehicles, energy-saving motors, pumps and compressors, and wind power turbines. Rare earth-bearing ores often contain low levels of naturally occurring radioactive materials (“NORM”).

MPMO’s mission to restore the full rare earth supply chain to the United States is supported by multiple Executive Orders and agency actions. The U.S. government unequivocally considers MPMO’s products to be critical to the economy and national security. Spurred by Executive Order 13817, the Department of the Interior designated 35 minerals that, if their supply chain were

disrupted, would present serious economic and national security issues.¹ MPMO’s ore body includes nearly all the lanthanide series of rare earth elements, which are included in the “rare earth group” category of the critical minerals listed by the Department of the Interior.

There is broad support for the development of the domestic rare earth industry. In 2020, President Trump issued an executive order that “relevant agencies should, as appropriate and consistent with applicable law, prioritize the expansion and protection of the domestic supply chain for minerals and the establishment of secure critical minerals supply chains, and should direct agency resources to this purpose.”² In January 2021, President Biden issued Executive Order 14008 that stated that the “Administration will help to catalyze private sector investment into, and accelerate the advancement of, America’s industrial capacity to supply, domestic clean energy, buildings, vehicles, and other necessary products and materials.”³ MPMO facilitates clean energy technologies, which depend on powerful rare earth magnets to turn energy into motion — electric vehicles, wind turbines, and drones. In February 2021, President Biden recognized the critical importance of rare earth minerals to America’s future when he issued Executive Order 14017 and ordered the creation of a report on critical supply chains that would, among other things, identify “risks in the supply chain for critical minerals and other identified strategic materials, including rare earth elements.” The resulting report, issued in June 2021, notes that “Neodymium (NdFeB) permanent magnets play a key role in motors and other devices, and are important to both defense and civilian industrial uses. Yet the U.S. is heavily dependent on imports for this critical product.”

MPMO is currently investing over \$200 million to upgrade, expand, and optimize its rare earth separation and finishing capability. It expects to spend several hundred million more to ensure a full U.S. supply chain for NdFeB permanent magnets, including new capability for metal reduction, alloying, and finished magnet production. To generate the cash flow required to finance these investments, MPMO currently exports intermediate products containing low levels of NORM. MPMO plans to sustain these exports prior to the ramp up of its own processing capability in 2023, at which time it does not anticipate further exports of unprocessed materials.

In further recognition of the importance of MPMO’s mission, the U.S. Department of Defense awarded a contract to MPMO to accelerate the restoration of domestic supply of certain rare earths⁴ and a separate grant under the Defense Production Act to upgrade its processing capabilities.⁵

¹ A Federal Strategy To Ensure Secure and Reliable Supplies of Critical Minerals, Exec. Order 13817 (Dec. 20, 2017); Final List of Critical Minerals, 83 Fed Reg. 23,295 (May 18, 2018).

² Addressing the Threat to the Domestic Supply Chain from Reliance on Critical Minerals from Foreign Adversaries, Exec. Order 13953 § 2(a) (Sept. 30, 2020).

³ Tackling the Climate Crisis at Home and Abroad, Exec. Order 14008 § 204 (Jan. 27, 2021).

⁴ https://s25.q4cdn.com/570172628/files/doc_news/archive/31be44cfbec9a97d15997bb1dcff5573.pdf.

⁵ Mining Company Determined to Restore U.S. Rare Earth Supply Chain, National Defense Magazine (Nov. 20, 2020), <https://www.nationaldefensemagazine.org/articles/2020/11/20/mining-company-determined-to-restore-us-rare-earth-supply-chain>.

Consignees in the People's Republic of China

As requested by the Office of International Programs, we have specifically listed in the Application the consignees in the People's Republic of China. None of the consignees are subsidiaries of China General Nuclear Power Group.

As noted in the Application, the purpose of the exports to China is solely for industrial and commercial use of rare earth minerals. The exported nuclear materials are trace contaminants of naturally-occurring uranium and thorium, 90% of which is typically thorium. In addition to being poorly suited for enrichment, these amounts are miniscule compared to China's sizeable domestic and foreign uranium assets. These trace amounts of radionuclides contained in MPMO's products are removed along with other extraneous materials and disposed of as part of the rare earth mineral refining process.

Thank you for your consideration of MPMO's Application and request for expedited action. MPMO would be pleased to provide any additional information that would be helpful to support this review.

Very truly yours,



Michael Rosenthal
Chief Operating Officer

Enclosure: Form 7 Application, MP Mine Operations LLC

CC (via email):

Peter Habighorst
Chief, Export Controls and Nonproliferation Branch
Office of International Programs
U.S. Nuclear Regulatory Commission
peter.habighorst@nrc.gov

Andrea Jones
Senior Licensing Officer
Office of International Programs
U.S. Nuclear Regulatory Commission
Andrea.Jones2@nrc.gov