

<b>NRC FORM 7</b> (8-2009) 10 CFR 110		<b>U.S. NUCLEAR REGULATORY COMMISSION</b>		<b>APPROVED BY OMB: NO. 3150-0027</b>		<b>EXPIRES: 08/31/2012</b>	
<b>APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL</b> (See Instructions on Page 5)				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 Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to <a href="mailto:infocollects.resource@nrc.gov">infocollects.resource@nrc.gov</a> , 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.			
<b>PART A. FOR NRC USE ONLY</b>		<input checked="" type="checkbox"/> PUBLIC OR <input type="checkbox"/> NON-PUBLIC		DATE RECEIVED <b>DEC 29 2016 SF</b>			
LICENSE NUMBER <b>XMAT422/02</b>		DOCKET NUMBER <b>11005997</b>		ADAMS ACCESSION NUMBER			
<b>PART B. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, RENEWALS OR NOTIFICATIONS</b> (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 <b>Cambridge Isotope Laboratories Inc.          50 Frontage Road          Andover, MA. 01810</b>			1a. NAME OF APPLICANT'S CONTACT <b>Gary Ionta</b>		1b. APPLICANT'S REFERENCE NUMBER		
			1c. PHONE NUMBER <b>(978) 749-8000</b>		1d. FAX NUMBER <b>(978) 749-2768</b>		
			1e. E-MAIL ADDRESS <b>garyi@isotope.com</b>				
2. TYPE OF ACTION REQUESTED (Check One)							
<input type="checkbox"/> EXPORT (Parts B, C, E) <input type="checkbox"/> NOTIFICATION OF EXPORT OF INCIDENTAL RADIOACTIVE MATERIAL (PART C, E) <input type="checkbox"/> IMPORT (Parts B, D, E) <input type="checkbox"/> COMBINED EXPORT/IMPORT (Parts B, C, D, E) <input checked="" type="checkbox"/> AMENDMENT/RENEWAL Existing License Number: <b>XMAT 422</b>							
3. CONTRACT NUMBER(S)		4. FIRST SHIPMENT DATE <b>01/11/2017</b>		5. LAST SHIPMENT DATE <b>01/01/2022</b>		6. PROPOSED EXPIRATION DATE <b>01/10/2022</b>	
<b>PART C. TO BE COMPLETED FOR EXPORT ONLY OR COMBINED LICENSES, AMENDMENTS, OR RENEWALS</b> (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 SUPPLIERS AND/OR OTHER PARTIES TO THE EXPORT <b>Cambridge Isotope Laboratories, Inc.          50 Frontage Road          Andover, MA. 01810</b>			8. NAME(S) / ADDRESS(ES) OF INTERMEDIATE FOREIGN CONSIGNEE(S)			9. NAME(S) / ADDRESS(ES) OF ULTIMATE FOREIGN CONSIGNEE(S)	
7a. FUNCTION(S) PERFORMED/SERVICE(S) PROVIDED			8a. INTERMEDIATE USE(S)			9a. ULTIMATE END USE(S)	
10. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES, EQUIPMENT, OR COMPONENTS; FOR NUCLEAR EQUIPMENT INCLUDE TOTAL DOLLAR VALUE OF EQUIPMENT FOR EXPORT <b>Non-radioactive,          Deuterium gas          Deuterium oxide          Deuterium compounds</b>			10a. MAX TOTAL VOLUME / ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq) <b>10,000Kg</b>		10b. MAX ENRICHMENT OR WGT % <b>99.99%</b>		10c. MAX ISOTOPE WGT (KG) <b>N/A,          Non-radioactive material, Not radioactive waste.</b>
11. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME)							

NRC FORM 7  
(8-2009)  
10 CFR 110

U.S. NUCLEAR REGULATORY COMMISSION

**APPLICATION FOR NRC EXPORT/IMPORT  
LICENSE, AMENDMENT, OR RENEWAL (Continued)**

LICENSE NUMBER <b>XMAT422/02</b>	DOCKET NUMBER <b>11005997</b>	ADAMS ACCESSION NUMBER	<input checked="" type="checkbox"/> PUBLIC OR <input type="checkbox"/> NON-PUBLIC
-------------------------------------	----------------------------------	------------------------	---


**PART D. TO BE COMPLETED FOR IMPORT ONLY, OR COMBINED 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 PARTIES TO IMPORT		13. NAME(S) / ADDRESS(ES) OF INTERMEDIATE CONSIGNEE(S)		14. NAME(S) / ADDRESS(ES) OF ULTIMATE CONSIGNEE(S)	
12a. NRC EXPORT LICENSE NUMBER(S) <i>(if applicable)</i> <b>XMAT422</b>		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. MAX 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, OR RENEWALS**

17. ADDITIONAL INFORMATION PROVIDED ON PAGES 3, 4, AND/OR ON SEPARATE SHEETS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	17a. COPIES OF RECIPIENTS' AUTHORIZATIONS PROVIDED? <input type="checkbox"/> YES <input checked="" 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 <b>Gary Ionta, Export Control Officer</b>	18b. SIGNATURE -- AUTHORIZED OFFICIAL 	18c. DATE <b>12/12/16</b>
---	---	------------------------------



NRC FORM 7  
(8-2009)  
10 CFR 110

U.S. NUCLEAR REGULATORY COMMISSION

**APPLICATION FOR NRC EXPORT/IMPORT  
LICENSE, AMENDMENT, OR RENEWAL (Continued)**

LICENSE NUMBER <b>XMAT422/02</b>	DOCKET NUMBER <b>11005997</b>	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)

Cambridge Isotope Laboratories, Inc. plan to sell the various deuterium compounds to the intermediate and ultimate consignees (listed in Part C. 8. and Part C.9) for further distribution into the China medical, pharmaceutical, chemical and industrial markets. Their customers in China typically use these materials in relatively small quantities, (less than 1 Kg) for scientific research. This type of research may include identification of chemicals in reaction pathways, metabolic studies, or environmental analysis.

No material will be used in any activity related to isotope separation, heavy water production, or in the fabrication of nuclear fuel.