

<b>NRC FORM 7</b> (8-2007) 10 CFR 110		<b>U.S. NUCLEAR REGULATORY COMMISSION</b> <b>APPROVED BY OMB: NO. 3150-0027</b> <b>EXPIRES: 06/30/2009</b> <small>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 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to <a href="mailto:infocollect@nrc.gov">infocollect@nrc.gov</a>, and to the Desk Officer, Office of Information and Regulatory Affairs, NECB-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.</small>	
<b>APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL</b> <i>(See Instructions on Page 5)</i>			
<b>PART A. FOR NRC USE ONLY</b>		<input checked="" type="checkbox"/> <b>PUBLIC</b> OR <input type="checkbox"/> <b>NON-PUBLIC</b>	
<b>LICENSE NUMBER</b> <div style="font-size: 1.2em; font-family: cursive;">XMAT436</div>		<b>DOCKET NUMBER</b> <div style="font-size: 1.2em; font-family: cursive;">11006225</div>	
<b>DATE RECEIVED</b> <div style="font-size: 1.2em; font-family: cursive;">APR 12 2016</div>		<b>ADAMS ACCESSION NUMBER</b>	
<b>PART B. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, RENEWALS OR NOTIFICATIONS</b> <small>(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)</small>			
<b>1. NAME AND ADDRESS OF APPLICANT/LICENSEE</b>  <b>Cambridge Isotope Laboratories, Inc. 50 Frontage Road, Andover, MA. 01810</b>		<b>1a. NAME OF APPLICANT'S CONTACT</b> <div style="text-align: center; font-weight: bold;">Gary Ionta</div>	
<b>1c. PHONE NUMBER</b> <div style="text-align: center; font-weight: bold;">(978) 749-8000</div>		<b>1b. APPLICANT'S REFERENCE NUMBER</b>  <b>1d. FAX NUMBER</b> <div style="text-align: center; font-weight: bold;">(978) 749-2768</div>	
<b>1e. E-MAIL ADDRESS</b> <div style="text-align: center; font-weight: bold;">garyi@isotope.com</div>			
<b>2. TYPE OF ACTION REQUESTED (Check One)</b> <input checked="" type="checkbox"/> <b>EXPORT</b> (Parts B, C, E) <input type="checkbox"/> <b>NOTIFICATION OF EXPORT OF INCIDENTAL RADIOACTIVE MATERIAL (PART C, E)</b> <input type="checkbox"/> <b>IMPORT</b> (Parts B, D, E) <input type="checkbox"/> <b>COMBINED EXPORT/IMPORT</b> (Parts B, C, D, E) <input type="checkbox"/> <b>AMENDMENT/RENEWAL</b> Existing License Number: _____			
<b>3. CONTRACT NUMBER(S)</b>		<b>4. FIRST SHIPMENT DATE</b> <div style="text-align: center; font-weight: bold;">03/01/2016</div>	
<b>5. LAST SHIPMENT DATE</b> <div style="text-align: center; font-weight: bold;">03/01/2021</div>		<b>6. PROPOSED EXPIRATION DATE</b> <div style="text-align: center; font-weight: bold;">03/01/2021</div>	
<b>PART C. TO BE COMPLETED FOR EXPORT ONLY OR COMBINED LICENSES, AMENDMENTS, OR RENEWALS</b> <small>(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)</small>			
<b>7. NAME(S) / ADDRESS(ES) OF SUPPLIERS AND/OR OTHER PARTIES TO THE EXPORT</b>  <b>Cambridge Isotope Laboratories, Inc. 50 Frontage Road, Andover, MA. 01810</b>		<b>8. NAME(S) / ADDRESS(ES) OF INTERMEDIATE FOREIGN CONSIGNEE(S)</b>	
<b>9. NAME(S) / ADDRESS(ES) OF ULTIMATE FOREIGN CONSIGNEE(S)</b>			
<b>7a. FUNCTION(S) PERFORMED/SERVICE(S) PROVIDED</b> <div style="text-align: center; font-weight: bold;">Supplier/Distributor</div>		<b>8a. INTERMEDIATE USE(S)</b> <div style="text-align: center; font-weight: bold;">See Page 3</div>	
<b>9a. ULTIMATE END USE(S)</b> <div style="text-align: center; font-weight: bold;">See Page 3</div>			
<b>10. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES, EQUIPMENT, OR COMPONENTS; FOR NUCLEAR EQUIPMENT INCLUDE TOTAL DOLLAR VALUE OF EQUIPMENT FOR EXPORT</b>  <div style="font-weight: bold;">Non-radioactive Deuterium gas Deuterium oxide Deuterium compounds</div>		<b>10a. MAX TOTAL VOLUME / ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq)</b>  <div style="font-weight: bold;">10,000 kg - 90% as deuterium oxide, remainder as gas and compounds.</div>	
<b>10b. MAX ENRICHMENT OR WGT %</b>  <div style="font-weight: bold;">99.99%</div>		<b>10c. MAX ISOTOPE WGT (KG)</b>  <div style="font-weight: bold;">N/A non-radioactive material, not radioactive waste</div>	
<b>11. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME)</b>			

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

LICENSE NUMBER <b>XMAT436</b>	DOCKET NUMBER <b>11006225</b>	ADAMS ACCESSION NUMBER	<input checked="" type="checkbox"/> PUBLIC OR <input type="checkbox"/> NON-PUBLIC
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**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.)

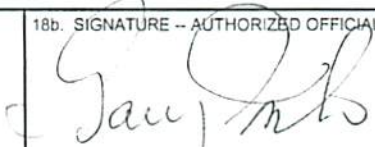
12. NAME(S) / ADDRESS(ES) OF FOREIGN SUPPLIERS AND/OR OTHER PARTIES TO IMPORT	13. NAME(S) / ADDRESS(ES) OF INTERMEDIATE CONSIGNEE(S)	14. NAME(S) / ADDRESS(ES) OF ULTIMATE CONSIGNEE(S)	
12a. NRC EXPORT LICENSE NUMBER(S) (if applicable)	13a. LICENSE NUMBER(S) / EXPIRATION DATE(S)	14a. LICENSE NUMBER(S) / EXPIRATION DATE(S)	
	13b. INTERMEDIATE USE(S)	14b. ULTIMATE END USE(S)	
15. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES	15a. 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
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**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 Compliance Officer</b>	18b. SIGNATURE -- AUTHORIZED OFFICIAL 	18c. DATE <b>4/11/14</b>
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APR 12 2016 *Rec'd*



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

LICENSE NUMBER <u>XINAT436</u>	DOCKET NUMBER <u>11004225</u>	ADAMS ACCESSION NUMBER	<input checked="" type="checkbox"/> PUBLIC OR <input type="checkbox"/> NON-PUBLIC
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ADDITIONAL INFORMATION (Reference applicable block numbers from page 1 and/or page 2 for each entry)

## NRC 7. Part C. 9a. - Ultimate end use(s)

Cambridge Isotope Laboratories, Inc. plan to sell the various deuterium compounds to intermediate and ultimate consignees (listed in Part C. 9., C.9a) for further distribution into the Denmark medical, pharmaceutical, chemical and industrial markets. Their customers in Denmark 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.

APR 12 2016 *Rec'd SF*



**Cambridge Isotope Laboratories, Inc.**

50 Frontage Road, Andover, MA 01810-5413 USA  
PH: 800.322.1174 (N. AMERICA) PH: 978.749.8000  
FAX: 978.749.2768 WEB: [www.isotope.com](http://www.isotope.com)

February 5, 2016

Deputy Director  
Office of International Programs  
U.S. Nuclear Regulatory Commission  
Washington, DC. 20555-0001

Dear Deputy Director:

Enclosed please find two completed NRC Export License application (form 7's) one public, one non public disclosure for the export of deuterium gas, deuterium oxide and deuterium compounds and an affidavit explaining the reasons for an exclusion of information per 10 CFR 2.390

These license applications are country specific for Denmark. A fee of \$9400.00 has been assigned Mr. Stephen Baker which has been included in this submission.

If you have any questions please contact me at your convenience.

Sincerely,

Gary J. Ionta  
EH&S Officer/Export Compliance Officer  
Cambridge Isotope Laboratories Inc.  
50 Frontage Road  
Andover, MA. 01810  
(978) 296-1924  
[garyi@isotope.com](mailto:garyi@isotope.com)