

<b>NRC FORM 7</b> (11-2012) 10 CFR 110	<b>U. S. NUCLEAR REGULATORY COMMISSION</b>	<b>APPROVED BY OMB: NO. 3150-0027</b> 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-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>EXPIRES: (11/30/2015)</b>
<b>APPLICATION FOR NRC EXPORT OR IMPORT LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S)</b> (See Instructions on Pages 4 and 5)			

<b>PART A. FOR NRC USE ONLY</b>	<input checked="" type="checkbox"/> PUBLIC OR <input type="checkbox"/> NON-PUBLIC	DATE RECEIVED <b>APR 28 2014</b> <i>Rec'd JC</i>
LICENSE NUMBER <b>XS NM 3752</b>	DOCKET NUMBER <b>11006162</b>	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  U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA) Y-12 National Security Complex 301 Bear Creek Road Oak Ridge, TN 37831	1a. NAME OF APPLICANT'S CONTACT Becky G. Eddy	1b. APPLICANT'S REFERENCE NUMBER AECL-EU14	1c. PHONE NUMBER (865) 576-4119	1d. FAX NUMBER (865) 574-0492
1e. E-MAIL ADDRESS becky.eddy@npo.doe.gov				
2. TYPE OF ACTION REQUESTED (Check One)				
<input checked="" type="checkbox"/> EXPORT (Parts B, C, E)		<input type="checkbox"/> IMPORT (Parts B, D, E)		<input type="checkbox"/> AMENDMENT/RENEWAL Current License Number:
				<input type="checkbox"/> CONSENT REQUEST (Parts B, C) Current License Number:
3. CONTRACT NUMBER(S) NNSASC11Y121206	4. FIRST SHIPMENT DATE 08/01/2014	5. LAST SHIPMENT DATE 04/01/2015	6. PROPOSED EXPIRATION DATE 07/31/2015	

**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 SUPPLIERS AND/OR OTHER PARTIES TO THE EXPORT  Department of Energy (DOE) National Nuclear Security Administration Y-12 National Security Complex 301 Bear Creek Road Oak Ridge, TN 37831	8. NAME(S) / ADDRESS(ES) OF INTERMEDIATE FOREIGN CONSIGNEE(S)	9. NAME(S) / ADDRESS(ES) OF ULTIMATE FOREIGN CONSIGNEE(S)  Atomic Energy of Canada Limited (AECL) Chalk River Laboratories Chalk River, Ontario K0J1J0 Canada	
7a. FUNCTION(S) PERFORMED/SERVICE(S) PROVIDED Supplier/Transportation	8a. INTERMEDIATE USE(S)	9a. ULTIMATE END USE(S) Targets for Medical Isotope Production	
10. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES, EQUIPMENT, OR COMPONENTS; FOR NUCLEAR EQUIPMENT INCLUDE TOTAL DOLLAR VALUE OF EQUIPMENT FOR EXPORT  7.0 kg uranium U-235 contained in a maximum of 7.5 kg uranium, enriched to a maximum of 93.35%	10a. MAX TOTAL VOLUME / ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq)  7.5 kg	10b. MAX ENRICHMENT OR WGT %  93.35%	10c. MAX ISOTOPE WGT (KG)  7.0 kg
11. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME)  100% US Obligation		<b>APR 28 2014</b> <i>Rec'd JC</i>	

NRC FORM 7  
(11-2012)  
10 CFR 110

U. S. NUCLEAR REGULATORY COMMISSION

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


LICENSE NUMBER <i>XSNM3752</i>	DOCKET NUMBER <i>11006162</i>	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 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 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. 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, RENEWALS OR CONSENT REQUEST(S)

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 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 Becky G. Eddy DOE NNSA Production Office, Program Manager	18b. SIGNATURE -- AUTHORIZED OFFICIAL 	18c. DATE <i>04/23/2014</i>

APR 28 2014

Rec'd  
JC

NRC FORM 7  
(11-2012)  
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APPLICATION FOR NRC EXPORT OR IMPORT  
LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)

LICENSE NUMBER XSNM3752	DOCKET NUMBER 11006162	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)

Part B, 4 and 5: Shipment dates do not reflect actual dates, rather they are the shipment time-frame needed to support target fabrication, target irradiation, and processing schedules to meet isotope production demand.

Page 1, Blocks 7 and 7a: - Other Parties to Export:

B&W Y-12 LLC (DOE/NNSA Contractor)

301 Bear Creek Road  
Oak Ridge, TN 37831

Consolidated Nuclear Security LLC (DOE/NNSA Contractor)

301 Bear Creek Road  
Oak Ridge, TN 37831

Page 1, Block 9a: For use in the fabrication of targets to be irradiated in the National Research Universal (NRU) reactor for the production of medical isotopes.

APR 28 2014

Rec'd

JC



U.S. Department of Energy  
 NNSA Production Office  
 Post Office Box 2050  
 Oak Ridge, Tennessee 37831-8009



April 23, 2014

Mark Shaffer, Deputy Director  
 Office of International Programs  
 U. S. Nuclear Regulatory Commission  
 11555 Rockville Pike  
 Rockville, Maryland 20852-2738

XSNH 3752

APR 28 2014  
 Red JC

Dear Mr. Shaffer:

**APPLICATION TO EXPORT ENRICHED URANIUM FOR THE ATOMIC ENERGY OF CANADA MOLYBDENUM-99 MEDICAL ISOTOPE PRODUCTION**

Enclosed is a Department of Energy (DOE), National Nuclear Security Administration (NNSA) application to export enriched uranium to the Atomic Energy of Canada Limited (AECL) for exclusive use in the fabrication of targets to be irradiated in the National Universal Reactor and Molybdenum-99 extracted to satisfy nuclear medicine demand (Enclosure 1).

The application has been determined to be unclassified, non-sensitive; however, Enclosure 2 contains commercial proprietary information prepared by AECL that has been determined to be business sensitive, shall be handled as Official Use Only, and cannot be released to the public. Interagency Agreement No. DE-AI52-09NA28981 between DOE and NRC was executed on April 15, 2009, for NRC export licensing services and fees, and sufficient funds are available for processing this export license. Please ensure the fees for this application are invoiced under this Interagency Agreement.

In the interest of supporting the production of medical isotopes, the NNSA Production Office requests that the review process be executed to support issuance of the export license by June 30, 2014. If you have any questions or require additional information, please contact me at (865) 576-4119 or [becky.eddy@npo.doc.gov](mailto:becky.eddy@npo.doc.gov).

Sincerely,

Becky G. Eddy  
 Program Manager  
 NNSA Production Office/Y-12

Enclosure 2 Transmitted Herein Contains Official Use Only - Commercial Proprietary Information.

Jerry L. Howell / Jerry L. Howell  
 letter When Separated from Enclosure 2, this document is Unclassified/Nonsensitive and Approved for Public Release. 04/23/2014  
 NPO Y-12 Class. Analyst

**OFFICIAL USE ONLY**

Mark Shaffer

-2-

April 23, 2014

Enclosures:

- 1) NRC Form 7 (AECL EU14)
- 2) AECL Checklist (supporting information)

cc w/enclosures:

T. Nelson, 301BCR, MS 8112, B&W Y-12

*Rec'd*  
APR 28 2014  
*JC*

ENCLOSURE 1  
Letter B. Eddy to  
M. Shaffer

NRC FORM 7 (AECL-EU14)

EXPORT LICENSE APPLICATION FOR THE DEPARTMENT OF ENERGY  
NATIONAL NUCLEAR SECURITY ADMINISTRATION EXPORT OF  
ENRICHED URANIUM FOR ATOMIC ENERGY OF CANADA LIMITED

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APR 28 2014  
*JC*

*Enclosure 1*

<b>APPROVED FOR PUBLIC RELEASE</b>	
This document has been approved for release to the public by:	
<i>for</i> <i>Derry S. Howard</i>	<i>04/23/2014</i>
<i>NPO-12 Class. Analyst</i>	Date

UNCLASSIFIED