APPLICATION FOR NRC EXPORT OR IMPORT LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S)
(See Instructions on Pages 4 and 5)

PART A. FOR NRC USE ONLY

☑ PUBLIC OR ☐ NON-PUBLIC

LICENSE NUMBER
XSNM3777

DOCKET NUMBER
11006244

ADAMS ACCESSION NUMBER

DATE RECEIVED
SEP 27 2016

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
CNL-EU16

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)
☑ EXPORT (Parts B, C, E)
☐ IMPORT (Parts B, D, E)
☐ AMENDMENT/RENEWAL Current License Number:

3. CONTRACT NUMBER(S)
NNSA-SC11-Y12-1206

4. FIRST SHIPMENT DATE
12/01/2016

5. LAST SHIPMENT DATE
03/31/2018

6. PROPOSED EXPIRATION DATE
03/31/2018

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(E) OF SUPPLIERS AND/OR OTHER PARTIES TO THE EXPORT
Department of Energy (DOE)
Nuclear Fuel Fabrication Facility
Chalk River Laboratories
286 Plant Road
Chalk River, Ontario K0J 1J0
Canada

8. NAME(S)/ADDRESS(E) OF INTERMEDIATE FOREIGN CONSIGNEE(S)
Canadian Nuclear Laboratories
Nuclear Fuel Fabrication Facility
Chalk River Laboratories
286 Plant Road
Chalk River, Ontario K0J 1J0
Canada

9. NAME(S)/ADDRESS(E) OF ULTIMATE FOREIGN CONSIGNEE(S)
Canadian Nuclear Laboratories
Chalk River Laboratories
National Research Universal (NRU) reactor
286 Plant Road
Chalk River, Ontario K0J 1J0
Canada

7a. FUNCTION(S) PERFORMED/SERVICE(S) PROVIDED
Supplier/Transporter

7b. FUNCTION(S) PERFORMED/SERVICE(S) PROVIDED
Target Fabrication

8a. INTERMEDIATE USE(S)
Target Irradiation/Mo-99 Production

10. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES, EQUIPMENT, OR COMPONENTS, FOR NUCLEAR EQUIPMENT INCLUDE TOTAL DOLLAR VALUE OF EQUIPMENT FOR EXPORT
2.8 kg uranium-235 contained in maximum of 3.0 kg uranium, enriched to maximum of 93.35%, in the form of broken uranium metal

10a. MAX TOTAL VOLUME / ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq)
3.0 kg

10b. MAX ENRICHMENT OR WGT %
93.35%

10c. MAX ISOTOPE WGT (KG)
2.8 kg

11. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME)
100% US Obligation

APPROVED FOR PUBLIC RELEASE
This document has been approved for release to the public by:

Scott A. Haines
9/12/16
**APPLICATION FOR NRC EXPORT OR IMPORT LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)**

<table>
<thead>
<tr>
<th>License Number</th>
<th>Docket Number</th>
<th>Adams Accession Number</th>
<th>Public or Non-Public</th>
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<tr>
<td>XSNM3777</td>
<td>11006244</td>
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<td>✓ PUBLIC</td>
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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.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>12a</td>
<td>NRC Export License Number(S) (if applicable)</td>
</tr>
<tr>
<td>12</td>
<td>Name(s) / Address(es) of Foreign Suppliers and/or Other Parties to Import</td>
</tr>
<tr>
<td>13a</td>
<td>License Number(s) / Expiration Date(s)</td>
</tr>
<tr>
<td>13</td>
<td>Name(s) / Address(es) of Intermediate Consignee(s)</td>
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<tr>
<td>14a</td>
<td>License Number(s) / Expiration Date(s)</td>
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<tr>
<td>14</td>
<td>Name(s) / Address(es) of Ultimate U.S. Consignee(s)</td>
</tr>
<tr>
<td>15a</td>
<td>Description of Radioactive Materials, Sealed Sources, Nuclear Facilities</td>
</tr>
<tr>
<td>15</td>
<td>Max Total Volume / Element Wgt (kg), or Total Activity (TBq)</td>
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<tr>
<td>15b</td>
<td>Max Enrichment or Wgt %</td>
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<tr>
<td>15c</td>
<td>Max Isotope Wgt (kg)</td>
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**PART E. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, RENEWALS OR CONSENT REQUEST(S)**

<table>
<thead>
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<tr>
<td>17a</td>
<td>Copies of Recipients' Authorizations Provided?</td>
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<tr>
<td>17</td>
<td>Additional Information Provided on Pages 3-4, and/or on Separate Sheets? ✓ YES □ NO</td>
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<tr>
<td>18a</td>
<td>Signature - Authorized Official</td>
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<td>18b</td>
<td>Date</td>
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</tbody>
</table>

**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?**

**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 Y-12, Program Manager

**18b. SIGNATURE - AUTHORIZED OFFICIAL**

[Signature]

**18c. DATE**

Sep. 9, 2016
APPLICATION FOR NRC EXPORT OR IMPORT
LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)

LICENSE NUMBER: XSNM3777
DOCKET NUMBER: 1100124-4
ADAMS ACCESSION NUMBER: [PUBLIC] OR [NON-PUBLIC]

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

Part B, Blocks 4 & 5:
First and last ship dates are not the actual ship dates, but bound the delivery time frames in the project schedule.

Part C, Blocks 7 & 7a:
Consolidated Nuclear Security (CNS) LLC
301 Bear Creek Road
Oak Ridge, TN 37831
(DOE/NNSA Supply and Transport Contractor)

Part C, 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.

Note: This export of HEU is consistent with the Government of Canada's NRU Contingency Plan, which would only be enacted and the HEU transported in the circumstances of an extended global shortage of the medical isotope Molybdenum-99, where other alternate technologies or sources are not available.