

ACCURACY

PERFORMANCE

ACCOUNTABILITY

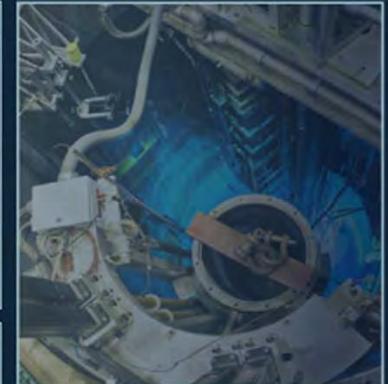


THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS  2013

USERS ANNUAL TRAINING MEETING

 MAY 20-23, 2013 - ST. LOUIS, MISSOURI 



United States Imports and Exports Case Study

Presented by:
Mitch Hembree & Len Myers
NMMSS



Import/Export Case Study

Issues to Consider

- What license is required
- Is the license valid
- Are the shipper and receiver valid NMMSS facilities (RIS)
- Is the reporting unit used appropriate for NMMSS reporting
- Is the quantity above NMMSS minimum reporting requirements

NOTE: for these examples, obligations will not be considered.

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

N M M S S  2013

USERS ANNUAL TRAINING MEETING

✻ MAY 20-23, 2013 - ST. LOUIS, MISSOURI ✻



Import/Export Case Study

CASE STUDY 1 - IMPORT

A United States enrichment facility Imixstuff will be receiving 18 containers (which contain 6,000,000 grams of Normal Uranium) from the Canadian conversion facility Itsallnatural on June 1, 2012.



Import/Export Case Study

Case 1 Evaluation

- Can general license (**GEN-LIC**) be used as the import license for Case 1?
 1. NRC states that except as provided in (2) and (3), a general license is issued to any person to import byproduct, source, or special nuclear material if the U.S. consignee is authorized to receive and possess the material under the relevant NRC or agreement state regulations.
 2. The general license in (1) does not authorize the import of more than 100 kilograms per shipment of source and/or special nuclear material in the form of irradiated fuel.
 3. (1) does not authorize the import under a general license of radioactive waste.



Import/Export Case Study

Case 1 Evaluation (continued)

- Are the shipper and receiver valid NMMSS RIS?
 - The RIS for Imixstuff is F01
 - The RIS for Itsallnatural is RD01
- Is the reporting unit used appropriate for NMMSS reporting?
 - The case description shows the quantity of normal uranium in grams. NMMSS requires normal uranium to be reported in kilograms.
- Is the total quantity above NMMSS minimum reporting amount?
 - For normal uranium, NMMSS requires reporting for amounts equal to or greater than 1 kilogram.

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NMMSS 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



Import/Export Case Study

Case 1 NMMSS 741 (Shipper Document)

DOE/NRC FORM 741 (8-2009). Previous editions are obsolete MANDATORY DATA COLLECTION AUTHORIZED BY 10 CFR 30, 40, 50, 70, 72, 74, 75, 150, Public Laws 83-703, 93-438, 95-91										U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY COMMISSION					APPROVED BY OMB: NO. 3150-0003 Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. 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 infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NE0B-10202, (3150-0003), 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.					EXPIRES: 06/31/2011				
NUCLEAR MATERIAL TRANSACTION REPORT																								
1. SHIPPER'S RIS		2. RECEIVER'S RIS		3. TRANSACTION NO.		4. CORRECTION NO.		5. PROCESSING CODE		6. ACTION CODE		7. DOCUMENTATION (Only if document is classified SECRET)												
a. NAME AND ADDRESS OF SHIPPER		b. LICENSE NO.		a. NAME AND ADDRESS OF RECEIVER		b. LICENSE NO.		a. SHIPPER A		b. RECEIVER		PAGE OF		PAGES COPY OF		COPIES SERIES								
8. NAME AND ADDRESS OF SHIPPER		9. LICENSE NO.		10. NAME AND ADDRESS OF RECEIVER		11. LICENSE NO.		12. SHIPPER A		13. RECEIVER		14. PAGE OF		15. PAGES COPY OF		16. COPIES SERIES								
c. ATTENTION:		d. TELEPHONE:		c. ATTENTION:		d. TELEPHONE:		17. SHIPPER A		18. RECEIVER		19. PAGE OF		20. PAGES COPY OF		21. COPIES SERIES								
14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER										15. EXPORT OR IMPORT TRANSFERS: LICENSE NO. GEN-LIC														
16. MATERIAL TYPE AND DESCRIPTION										17. LINE NUMBER		18. COUNTRY OF OBLIGATION		19. MATERIAL TYPE		20. OBLIGATED ELEMENT WEIGHT		21. OBLIGATED ISOTOPE For Enriched Uranium Only		22. ACTION DATE				
23. a. CONCISE NOTE ATTACHED <input type="checkbox"/>										24. TOTAL GROSS WEIGHT		25. TOTAL VOLUME (When transfers only)		26. SHIPMENT		MONTH (MM)		DAY (DD)		YEAR (YYYY)				
b. CONCISE NOTE ATTACHED <input type="checkbox"/>										26. SHIPMENT		MONTH (MM)		DAY (DD)		YEAR (YYYY)		27. SHIPMENT						
c. UK REPORTABLE? <input type="checkbox"/> YES <input type="checkbox"/> NO										26. SHIPMENT		MONTH (MM)		DAY (DD)		YEAR (YYYY)		27. SHIPMENT						
26. SHIPPER'S DATA										27. RECEIVER'S DATA														
BACK REFERENCE NUMBER	LINE NO.	TYPE OF INV. CHANGE	IDENTIFICATION (ITEM/BATCH NAME)	NO. OF ITEMS	PROJECT NUMBER	MATERIAL TYPE	COMP. FACILITY CODE	OWNER CODE	KEY MEAS. POINT	MEAS. IDENT.	GROSS WEIGHT	NET WEIGHT	ELEMENT WEIGHT	ELEMENT LIMIT OF ERROR	WEIGHT % ISOTOPE	ISOTOPE WEIGHT	ISOTOPE LIMIT OF ERROR							
	01			10		N	637	J					2.800			0								
	02			18		N	637	J					3.200			0								

Action Code: A

Shipper's Detail

Date: 5/1/2012

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

N M M S S 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



Import/Export Case Study

CASE STUDY 2 - IMPORT

A United States facility Igetstuff will be receiving 1 container of waste material (which contain 6,500 grams element weight and 230 grams isotope weight of Enriched Uranium) from the French facility Imspecial on September 30, 2012.



Import/Export Case Study

Case 2 Evaluation

- Can general license (**GEN-LIC**) be used as the import license for Case 2?
 - NRC states that except as provided in (2) and (3), a general

Can not use GEN-LIC – a specific license must be used for import of radioactive waste.

agreement State regulations.

- The general license in (1) does not authorize the import of more than 100 kilograms per shipment of source and/or special nuclear material in the form of irradiated fuel.
- (1) does not authorize the import under a general license of radioactive waste.**



Import/Export Case Study

License Issues to Consider

- Is the license active
- Is the import exceeding quantity limits for the license
- Is this license pertinent to shipper and receiver

License valid from May 6, 2011 through May 6, 2015

Total not to exceed 2,613 kgs of Uranium-235 contained in 58,575 kgs of uranium...

IMPORT LICENSE	
NRC FORM 250 (10-07)	NRC LICENSE NO.: IWAAA
UNITED STATES OF AMERICA Nuclear Regulatory Commission Washington, D.C. 20555	NRC DOCKET NO.: 9999001
	LICENSE EXPIRES: MAY 6, 2015
Pursuant to the Atomic Energy Act of 1954, as amended, and Title 10, Code of Federal Regulations, Chapter 1, Part 110, a license is issued to the licensee authorizing the import of nuclear materials and facilities into the United States of America.	
Reference Documents: Application dated 8/30/2010; Letter dated 10/31/2011; Applicants reference number: IMP-2010-A	
Reference Documents: Application number: IMP-2010-1	010; Letter dated 01/13/2011; Applicant's reference number:
U.S. Import Licensee:	IGETSTUFF 1800 Happy Street Heavenly, CO 99922
Contact:	Jane Doe
U.S. Receiving Facility:	IGETSTUFF 1800 Happy Street Heavenly, CO 99922
Contact:	Jane Doe
Quantity and Type: The total quantity of radioactive waste authorized for import shall not exceed 186,000 kilograms of various materials including processed and unprocessed mixed metals, filter cake, spent metal shot, trash, and protective clothing contaminated with a maximum total not to exceed 2,613 kilograms of uranium-235 contained in 58,575 kilograms of uranium over the duration of this license. There will be numerous import shipments, and the specific quantity of U-235 shall not at any time exceed the 350-gram limit specified in the U.S. recipient's domestic possession license.	
Points of Origin:	IMSPECIAL 70 AndIKnowIt Drive Dontspeakenglishtome, France
End Use:	The contaminated metals and associated secondary wastes are of U.S. origin and are being returned to the United States for management and disposal
Authorized for the U.S. Nuclear Regulatory Commission by:	
Name:	Signature: _____
Date of Issuance:	MAY 6, 2011
License Condition: This NRC license authorizes import only. The U.S. licensee, receiving facility, and disposal facility are responsible for complying with any and all additional Federal and State government requirements that apply, including all terms and conditions of their domestic materials licenses.	
IMPORT LICENSE	



Import/Export Case Study

Case 2 Evaluation (continued)

- Are the shipper and receiver valid NMMSS RIS?
 - The RIS for Igetstuff is F02
 - The RIS for Imspecial is RF02
- Is the reporting unit used appropriate for NMMSS reporting?
 - The case description shows the quantity of enriched uranium in grams. NMMSS requires enriched uranium to be reported in grams.
- Is the total quantity above NMMSS minimum reporting amount?
 - For enriched uranium, NMMSS requires reporting for amounts equal to or greater than 1 gram.

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



Import/Export Case Study

Case 2 NMMSS 741 (Shipper Document)

DOE/NRC FORM 741 (8-2008) Previous editions are obsolete MANDATORY DATA COLLECTION AUTHORIZED BY 10 CFR 30, 40, 50, 70, 72, 74, 75, 150, Public Laws 83-703, 93-438, 95-91										U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY COMMISSION					APPROVED BY OMB: NO. 3150-0003 Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (T-5 F-53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.					EXPIRES: 05/31/2011							
NUCLEAR MATERIAL TRANSACTION REPORT																											
1. SHIPPER'S RIS		2. RECEIVER'S RIS		3. TRANSACTION NO.		4. CORRECTION NO.		5. PROCESSING CODE		6. ACTION CODE		7. DOCUMENTATION (Only if document is classified SECRET)															
RF02		F02		1234								PAGE		OF		PAGES		COPY		OF		COPIES		SERIES			
8. a. NAME AND ADDRESS OF SHIPPER				b. LICENSE NO.		9. a. NAME AND ADDRESS OF RECEIVER				b. LICENSE NO.		10. NO. OF DATA LINES		a. SHIPPER A		b. RECEIVER		a. SHIPPER A		b. RECEIVER		b. RIS		NO.		DISTRIBUTION OF COPIES	
c. ATTENTION:						c. ATTENTION:																					
d. TELEPHONE:						d. TELEPHONE:																					
14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER										15. EXPORT OR IMPORT TRANSFERS: LICENSE NO. IWAAA																	
16. MATERIAL TYPE AND DESCRIPTION										17. LINE NUMBER		18. COUNTRY OF OBLIGATION		19. MATERIAL TYPE		20. OBLIGATED ELEMENT WEIGHT		21. OBLIGATED ISOTOPE WEIGHT For Enriched Ura		b. SHIPPER'S CORRECTION		c. RECEIPT		d. RECEIVER'S MEASUREMENT		e. RECEIVER'S CORRECTION	
23a. MISCELLANEOUS										b. CONCISE NOTE ATTACHED <input type="checkbox"/>		c. UK REPORTABLE? <input type="checkbox"/> YES <input type="checkbox"/> NO															
24. TOTAL GROSS WEIGHT										25. TOTAL VOLUME (Waste Transfers Only)																	
26. SHIPPER'S DATA	BACK REFERENCE NUMBER	LINE NO.	TYPE OF INV. CHANGE	IDENTIFICATION (ITEM/BATCH NAME)	NO. OF ITEMS	PROJECT NUMBER	MATERIAL TYPE	COMP. FACILITY CODE	OWNER CODE	KEY MEAS. POINT	MEAS. IDENT.			GROSS WEIGHT	NET WEIGHT	ELEMENT WEIGHT	ELEMENT LIMIT OF ERROR	WEIGHT % ISOTOPE	ISOTOPE WEIGHT	ISOTOPE LIMIT OF ERROR							
	a.	b.	c.	d.	e.	f.	g.	h.	i.	j.	1. BASIS	2. CMP	3. METHOD	l.	m.	n.	o.	p.	q.	r.							
		01			1		EG	776	J							6.500		3.54	230								
26s. SHIPPER'S DATA										27s. RECEIVER'S DATA																	
SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED										SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED																	
27. RECEIVER'S DATA																											

Action Code: A

Date: 8/15/2012

Shipper's Detail

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECTS. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



Import/Export Case Study

CASE STUDY 3 - EXPORT

A United States facility SendoutStuff will be shipping 3 container of unirradiated process residues (which contain 150 grams element weight and 6 grams isotope weight of Enriched Uranium) to the facility Imabrit in the United Kingdom on March 15, 2012.



Import/Export Case Study

Case 3 Evaluation

- Can general license (**GEN-LIC**) be used as the export license for Case 3?
 1. NRC states that GEN-LIC can be used for items consisting of low-enriched uranium as residual contamination (17.5 parts per million or less) in any item or substance.



Import/Export Case Study

Case 3 Evaluation (continued)

- Are the shipper and receiver valid NMMSS RIS?
 - The RIS for Sendoutstuff is F03
 - The RIS for Imabrit is RD03
- Is the reporting unit used appropriate for NMMSS reporting?
 - The case description shows the quantity of enriched uranium in grams. NMMSS requires enriched uranium to be reported in grams.
- Is the total quantity above NMMSS minimum reporting amount?
 - For enriched uranium, NMMSS requires reporting for amounts equal to or greater than 1 gram.

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



Import/Export Case Study

Case 3 NMMSS 741 (Shipper Document)

DOE/NRC FORM 741

(8-2008) Previous editions are obsolete
 MANDATORY DATA COLLECTION
 AUTHORIZED BY 10 CFR 30, 40, 50, 70, 72, 74, 75, 150,
 Public Laws 83-703, 93-438, 95-91

U.S. DEPARTMENT OF ENERGY
 AND
 U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0003

EXPIRES: 05/31/2011

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (1-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.

NUCLEAR MATERIAL TRANSACTION REPORT

1. SHIPPER'S RIS F03	2. RECEIVER'S RIS RD03	3. TRANSACTION NO. 62999	4. CORRECTION NO.	5. PROCESSING CODE	6. ACTION CODE	7. DOCUMENTATION (Only if document is classified SECRET)											
8a. NAME AND ADDRESS	b. LICENSE	8a. NAME AND ADDRESS	b. LICENSE	a. SHIPPER	b. RECEIVER A	a. SHIPPER	b. RECEIVER A	PAGE OF	PAGES	COPY OF	COPIES	SERIES					
<p>Shipper:RD03 Receiver:F03</p> <p>Action Code: A</p>																	
<p>10. NO OF DATA LINES</p> <p>12a. SHIPPED FOR ACCOUNT OF</p> <p>b. RIS</p>																	
<p>14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER</p>																	
<p>15. EXPORT OR IMPORT TRANSFERS: LICENSE NO. GEN-LIC</p>																	
<p>16. MATERIAL TYPE AND DESCRIPTION</p>																	
<p>22. ACTION DATE</p> <table border="1"> <tr> <th>MONTH (MM)</th> <th>DAY (DD)</th> <th>YEAR (YYYY)</th> </tr> <tr> <td>03</td> <td>15</td> <td>2012</td> </tr> </table>												MONTH (MM)	DAY (DD)	YEAR (YYYY)	03	15	2012
MONTH (MM)	DAY (DD)	YEAR (YYYY)															
03	15	2012															

<p>17. LINE NUMBER</p> <p>18. COUNTRY OF OBLIGATION</p> <p>19. MATERIAL TYPE</p> <p>20. OBLIGATED ELEMENT WEIGHT</p> <p>OBLIGA For Enrich</p>											
<p>23a. MISCELLANEOUS</p> <p>b. CONCISE NOTE ATTACHED <input type="checkbox"/></p> <p>c. UK REPORTABLE? <input type="checkbox"/> YES <input type="checkbox"/> NO</p>											
<p>24. TOTAL GROSS WEIGHT</p> <p>25. TOTAL VOLUME (Waste Transfers Only)</p>											

SHIPPER'S DATA	BACK REFERENCE NUMBER	LINE NO.	TYPE OF INV. CHANGE	IDENTIFICATION (ITEM/BATCH NAME)	NO. OF ITEMS	PROJECT NUMBER	MATERIAL TYPE	COMPL. FACILITY CODE	OWNER CODE	KEY MEAS. POINT	MEAS. IDENT.			GROSS WEIGHT	NET WEIGHT	ELEMENT WEIGHT	ELEMENT LIMIT OF ERROR	WEIGHT % ISOTOPE	ISOTOPE WEIGHT	ISOTOPE LIMIT OF ERROR
											1 BASIS	2 OMP	3 METHOD							
		01			3		EG	729	J							150		4.0	6	

<p>Shipper Detail</p> <p># of Items: 3</p> <p>Material Type: EG</p> <p>Total Element Weight: 150 g element 6 g isotope</p>											
<p>27. RECEIVER'S DATA</p>											

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THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

N M M S S 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



Import/Export Case Study

CASE STUDY 4 - EXPORT

A United States facility Superduper will be shipping 25 container of material (which contain 5000 grams of Thorium and 5000 grams of Natural Uranium) to the facility ChinatownCo on January 20, 2012.



Import/Export Case Study

Case 4 Evaluation

- Can general license (**GEN-LIC**) be used as the export license for Case 4?
 1. **A general license is issued to any person to export uranium or thorium, other than uranium-230, uranium-232, thorium-227, or thorium-228, in individual shipments of 1 kilogram or less... not to exceed 100 kilograms per calendar year to any one country.**

Can not use GEN-LIC due to quantity limits – a specific license must be used for export of this quantity of natural uranium and thorium.



Import/Export Case Study

License Issues to Consider

- Is the license active
- Is the export exceeding quantity limits for the license
- Is this license pertinent to shipper

License valid from Jan. 1, 2011 through March 31, 2019

Total for natural uranium and thorium not to exceed 30,000 kgs.

EXPORT LICENSE							
NRC FORM 250 (10-07)							
UNITED STATES OF AMERICA Nuclear Regulatory Commission Washington, D.C. 20555							
NRC LICENSE NO.: XSOU99999 NRC DOCKET NO.: 9999891 LICENSE EXPIRES: 3/31/2019							
Pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974 and the regulations of the Nuclear Regulatory Commission issued pursuant thereto, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued to the licensee authorizing the export of the materials and/or production or utilization facilities listed below, subject to the terms and conditions herein.							
LICENSEE Superduper 9999 Fantastic Lane Defeated, KY 99933	ULTIMATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES) See Pages 2 and 3 (For non-nuclear end uses in recovering tantalum and niobium)						
INTERMEDIATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES) NONE	OTHER U.S. PARTY(IES) TO EXPORT NONE						
APPLICANT'S REFERENCE NO. Appl. Dated 10/23/2012	ULTIMATE DESTINATION: Brazil, Canada, China, Estonia, Germany, Japan, Kazakhstan, and Thailand						
<table border="1"> <thead> <tr> <th>QUANTITY</th> <th>DESCRIPTION OF MATERIALS OR FACILITIES</th> </tr> </thead> <tbody> <tr> <td>30,000.0 Kilograms</td> <td>Natural Uranium (U308)</td> </tr> <tr> <td>30,000.0 Kilograms</td> <td>Thorium (ThO2)</td> </tr> </tbody> </table>	QUANTITY	DESCRIPTION OF MATERIALS OR FACILITIES	30,000.0 Kilograms	Natural Uranium (U308)	30,000.0 Kilograms	Thorium (ThO2)	As contaminants contained in 3,000,000.0 Kilograms tantalum and niobium ores.
QUANTITY	DESCRIPTION OF MATERIALS OR FACILITIES						
30,000.0 Kilograms	Natural Uranium (U308)						
30,000.0 Kilograms	Thorium (ThO2)						
END							
Neither this license nor any right under this license shall be assigned or otherwise transferred in violation of the provisions of the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974. This license is subject to the right of recapture or control by Section 108 of the Atomic Energy Act of 1954, as amended, and to all of the other provisions of said Acts, now or hereafter in effect and to all valid rules and regulations of the Nuclear Regulatory Commission.	THIS LICENSE IS INVALID UNLESS SIGNED BELOW BY AUTHORIZED NRC REPRESENTATIVE SIGNATURE: NAME AND TITLE: DATE OF ISSUANCE: 1/1/2011						



Import/Export Case Study

License Issues to Consider (continued)

- Is this license pertinent to receiver

XSou99999
Page 2 of 2

ULTIMATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES): (Cont'd)

1. Est_Facility
No 1243
Esttown
Estonia
2. Braziltowh
234 State Street
Sao Paulo
Brazil
3. Chong Metals
Shen Town
Guanghome
Chins
4. ChinatownCo
ShiShi Town
Lion Hill
Hunan
China



Import/Export Case Study

Case 4 Evaluation (continued)

- Are the shipper and receiver valid NMMSS RIS?
 - The RIS for Superduper is F04
 - The RIS for ChinatownCo is RP01
- Is the reporting unit used appropriate for NMMSS reporting?
 - The case description shows the quantity of normal uranium and thorium in grams. NMMSS requires normal uranium and thorium to be reported in kilograms.
- Is the total quantity above NMMSS minimum reporting amount?
 - For natural uranium and thorium, NMMSS requires reporting for amounts equal to or greater than 1 kilogram.



Import/Export Case Study

Case 4 NMMSS 741 (Shipper Document)

DOE/NRC FORM 741
(8-2008) Previous editions are obsolete
MANDATORY DATA COLLECTION
AUTHORIZED BY 10 CFR 30, 40, 60, 70, 72, 74, 75, 150,
Public Laws 83-703, 93-438, 95-91

**U.S. DEPARTMENT OF ENERGY
AND
U.S. NUCLEAR REGULATORY COMMISSION**

APPROVED BY OMB: NO. 3150-0003
Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (T-5 F-53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NE08-10202, (3150-0003), 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.

EXPIRES: 05/31/2011

NUCLEAR MATERIAL TRANSACTION REPORT

1. SHIPPER'S RIS F04		2. RECEIVER'S RIS RP01		3. TRANSACTION NO. 9		4. CORRECTION NO.		5. PROCESSING CODE		6. ACTION CODE		7. DOCUMENTATION (Only if document is classified SECRET)							
8. NAME AND ADDRESS a. NAME AND ADDRESS b. LICENSE		9. NAME AND ADDRESS a. NAME AND ADDRESS b. LICENSE		10. NO OF DATA LINES 12. SHIPPED FOR ACCOUNT OF		11. SHIPPER a. SHIPPER b. RECEIVER		13. SHIPPER a. SHIPPER b. RECEIVER		14. ACTION CODE a. SHIPPER b. RECEIVER		PAGE OF PAGES		COPY OF COPIES		SERIES			
6. ATTENTION:		6. ATTENTION:		15. EXPORT OR IMPORT TRANSFERS: LICENSE NO. XSOU99999		17. LINE		18. COUNTRY OF ORIGIN		19. MATERIAL TYPE		20. OBLIGATED ELEMENT WEIGHT		21. OBLIGATION FOR ENRICH		22. ACTION DATE a. SHIPMENT b. SHIPPER'S CORRECTION c. RECEIPT d. RECEIVER'S MEASUREMENT e. RECEIVER'S CORRECTION			
8. TELEPHONE:		8. TELEPHONE:		14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER		15. EXPORT OR IMPORT TRANSFERS: LICENSE NO. XSOU99999		17. LINE		18. COUNTRY OF ORIGIN		19. MATERIAL TYPE		20. OBLIGATED ELEMENT WEIGHT		21. OBLIGATION FOR ENRICH		22. ACTION DATE a. SHIPMENT b. SHIPPER'S CORRECTION c. RECEIPT d. RECEIVER'S MEASUREMENT e. RECEIVER'S CORRECTION	
16. MATERIAL TYPE AND DESCRIPTION		16. MATERIAL TYPE AND DESCRIPTION		16. MATERIAL TYPE AND DESCRIPTION		16. MATERIAL TYPE AND DESCRIPTION		16. MATERIAL TYPE AND DESCRIPTION		16. MATERIAL TYPE AND DESCRIPTION		16. MATERIAL TYPE AND DESCRIPTION		16. MATERIAL TYPE AND DESCRIPTION		16. MATERIAL TYPE AND DESCRIPTION		16. MATERIAL TYPE AND DESCRIPTION	
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24. TOTAL GROSS WEIGHT		24. TOTAL GROSS WEIGHT		24. TOTAL GROSS WEIGHT		24. TOTAL GROSS WEIGHT		24. TOTAL GROSS WEIGHT		24. TOTAL GROSS WEIGHT		24. TOTAL GROSS WEIGHT		24. TOTAL GROSS WEIGHT		24. TOTAL GROSS WEIGHT		24. TOTAL GROSS WEIGHT	
25. TOTAL VOLUME (Waste Transfers Only)		25. TOTAL VOLUME (Waste Transfers Only)		25. TOTAL VOLUME (Waste Transfers Only)		25. TOTAL VOLUME (Waste Transfers Only)		25. TOTAL VOLUME (Waste Transfers Only)		25. TOTAL VOLUME (Waste Transfers Only)		25. TOTAL VOLUME (Waste Transfers Only)		25. TOTAL VOLUME (Waste Transfers Only)		25. TOTAL VOLUME (Waste Transfers Only)		25. TOTAL VOLUME (Waste Transfers Only)	

SHIPPER'S DATA	BACK REFERENCE NUMBER	LINE NO.	TYPE OF REV. CHANGE	IDENTIFICATION (ITEM/BATCH NAME)	NO. OF ITEMS	PROJECT NUMBER	MATERIAL TYPE	COMP. FACILITY CODE	OWNER CODE	REV. MEAS. POINT	MEAS. IDENT.			GROSS WEIGHT	NET WEIGHT	ELEMENT WEIGHT	ELEMENT LIMIT OF ERROR	WEIGHT % ISOTOPE	ISOTOPE WEIGHT	ISOTOPE LIMIT OF ERROR
											1 BASIS	2 OMP	3 METHOD							
		01			20		N	776	J							5			0	
		02			5		T	776	J							5			0	

Shipper: F04 Receiver: RP01

Action Code: A

Date: 1/20/2012

License: XSOU99999

Shipper Detail # of Items: 25

Material Type: N T

Total Element Weight: 5 kg N 5 kg T

27. RECEIVER'S DATA

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECTS. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

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Case 4 NMMSS 741 (Receiver Document)

DOE/NRC FORM 741 (8-2008). Previous editions are obsolete MANDATORY DATA COLLECTION AUTHORIZED BY 10 CFR 30, 40, 50, 70, 72, 74, 75, 150, Public Laws 83-703, 93-438, 95-91										U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY COMMISSION										APPROVED BY OMB: NO. 3150-0003 Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. 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 infocollects@nrc.gov , and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.										EXPIRES: 05/31/2011																																																																																																																																																																																																																	
NUCLEAR MATERIAL TRANSACTION REPORT										1. SHIPPER'S RIS: F04										2. RECEIVER'S RIS: RP01										3. TRANSACTION NO: 9										4. CORRECTION NO.										5. PROCESSING CODE										6. ACTION CODE										7. DOCUMENTATION (Only if document is classified SECRET)																																																																																																																																																																									
8.a. NAME AND ADDRESS OF SHIPPER										8.b. LICENSE NO.										9.a. NAME AND ADDRESS OF RECEIVER										9.b. LICENSE NO.										10. NO OF DATA LINES										11. NATURE OF TRANSACTION										12. SHIPPED FOR ACCOUNT OF										13. b. RIS										14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER										15. EXPORT OR IMPORT TRANSFERS: LICENSE NO. XSOU99999										16. MATERIAL TYPE AND DESCRIPTION										17. LINE NUMBER										18. COUNTRY OF OBLIGATION										19. MATERIAL TYPE										20. OBLIGATED ELEMENT WEIGHT										21. OBLIGATED WEIGHT For Enriched Uranium Only										22. ACTION DATE										23a. MISCELLANEOUS										b. CONCISE NOTE ATTACHED <input type="checkbox"/>										c. UK REPORTABLE? <input type="checkbox"/> YES <input type="checkbox"/> NO										24. TOTAL GROSS WEIGHT										25. TOTAL VOLUME (Whole Transfers Only)										26. SHIPPER'S DATA										27. RECEIVER'S DATA									
22. ACTION DATE										a. SHIPMENT										b. SHIPPER'S CORRECTION										c. RECEIPT										d. RECEIVER'S MEASUREMENT										e. RECEIVER'S CORRECTION										MONTH (MM)										DAY (DD)										YEAR (YYYY)										NO. COPIES										DISTRIBUTION OF COPIES																																																																																																																																											
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Action Code: B

Date: 3/1/2012

Receiver's Detail

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECTS. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS 2013

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NMMSS Validation/Verification of Import/Export Activity

- Validation confirms acceptable data as defined in NMMSS
- Verification assures correctness of import/export data
- The following NMMSS attributes are validated:
 - RIS
 - License
 - Date
 - Material type
- Verification of use are identified through facility reconciliation and agreement country reconciliation

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

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Questions?