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NRC FORM 7 U.S. NUCLEAR (6-2006) 10 CFR 110	REGULATORY	COMMISSION	submittal is reviewed to en	onse to comply w sure that the app	ith this mandatory icable statutory, re	EXPIRES: 06/30/2009 collection request: 2.4 hours. This gulatory, and policy considerations of the Records and FOIA/Privacy	
APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 205 or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information Programment and Budget, Wa DC 20503. If a means used to impose an information collection does not display a currence of MB control number, the NRC may not conduct or sponsor, and a person is not re-					c Officer, Office of Information and agement and Budget, Washington, in does not display a currently valid		
(See Instructions on Pa	(See Instructions on Page 5) OMB control humber, the NRC may not conduct of sponsor, and a person is not required to respond to, the information collection.						
PART A. FOR NRC USE ONLY	PUBL	PUBLIC FOR		DATE RECE	36-C	28 complet	
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PART B. TO BE COM (If more space is needed to comple	PLETED FOR	R ALL LICE	NSES, AMENDN 3-4 first, and then att	MENTS, O	R RENEW.	ALS ecessary.)	
1. NAME AND ADDRESS OF APPLICANT/LICENSEE	1a. l	NAME OF APPLI	CANT'S CONTACT	1b. AF	PLICAN'TS RE	FERENCE NUMBER	
U.S. Department of Energy		Heidi William	s	0	08-016		
New Brunswick Laboratory 9800 South Cass Avenue Building 350	-	1c. PHONE NUMBER (630) 252-276			1d. FAX NUMBER (630) 252-4146		
Argonne, IL 60439		E-MAIL ADDRES					
2. TYPE OF NRC LICENSE REQUESTED (Che	ck One)					:	
EXPORT IMPORT (Parts B, C, E)	E)	COMBINED E (Parts B, C, D,	XPORT/IMPORT E)		NDMENT/REI ng License N XSNM3485	umber:	
3. CONTRACT NUMBER(S) 4. FIRST SHI 08-016 07/01/2	PMENT DATE		ST SHIPMENT DATE 2/31/2013		6. PROPOSEI 12/31/20	D EXPIRATION DATE	
PART C. TO BE COMPLETED FOR (If more space is needed to comple	EXPORT ON	ILY OR CO	MBINED LICENS 3-4 first, and then att	SES, AME	NDMENTS al sheets. if n	6, OR RENEWALS	
7. NAME(S) / ADDRESS(ES) OF SUPPLIERS AND/OR OTHER PARTIES TO THE EXPORT	8. NAME(S) / AD		INTERMEDIATE	9. NAME(S)) OF ULTIMATE	
				Japan Nuclear Fuel Limited 4-108, Aza Okitsuke, Oaza Obuchi, Rokkasho-mura, Kamikita-gun, Aomori-ken, 039-3212 JAPAN			
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7a. LIST FUNCTIONS PERFORMED/SERVICE PROVIDED 8a. INTERMEDIATE USE(S)			9a. ULTIMATE END USE(S) Reference Material				
10. DESCRIPTION OF RADIOACTIVE MATERIALS, SI NUCLEAR FACILITIES, EQUIPMENT, OR COMPO		ELEI	TOTAL VOLUME / MENT WGT (KG), OR AL ACTIVITY (TBq)	10b. MAX EN OR WG		10c. MAX ISOTOPE WGT (KG)	
High Enriched Uranium as Solid, Metal	:	0.240 k	"	97% enric	hed	0.233 kg	
						Pac 8	
11. FOREIGN OBLIGATIONS (BY COUNTRY AND BY	PERCENTAGE OF	MAXIMUM TOT	AL VOLUME)			0 4	

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NRC FORM 7 (6-2006) 10 CFR 110 U.S. NUCLEAR REGULATORY COMMISSION

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

LICENSE NUMBER XSVM 3485/0/ 1/00	5675 A	DAMS ACCESSION NUMBER	PUBLIC OR	NON-PUBLICA			
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) / ADDRE CONSIGNEE(S)	ESS(ES) OF INTERMEDIATE	14. NAME(S) / ADDRESS(ES CONSIGNEE(S)	S) OF ULTIMATE			
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	13b. INTERMEDIATE	, ,	445 INTERMEDIATE USE/C				
	13D. INTERIMEDIATE	USE(S)	14b. INTERMEDIATE USE(S				
15. DESCRIPTION OF RADIOACTIVE MATERIALS, SEA NUCLEAR FACILITIES	ALED SOURCES,	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 P	ERCENTAGE OF MAX	(IMUM TOTAL VOLUME)					
PART E. TO BE COMP	PLETED FOR <u>AL</u>	<u>L</u> LICENSES, AMENDI	MENTS, OR RENEWA	ALS			
17. ADDITIONAL INFORMATION PROVIDED ON PAGES 3, 4, AND/OR ON SEPARATE SHEETS? 17a. COPIES OF RECIPIENTS' AUTHORIZATIONS PROVIDED? YES NO AUTHORIZATIONS PROVIDED?							
18. CERTIFICATION: I, the applicant's authorized official, hereby certify that this application is prepared in conformity with Title10, 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 Jon Neuhoff, Laboratory Director New Brunswick Laboratory 18b. SIGNATURE – AUTHORIZED OFFICIAL 18c. DATE 0 2/21/0 8							
				<u> </u>			

Page	3	of	3
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NRC FORM 7 (6-2006) 10 CFR 110 U.S. NUCLEAR REGULATORY COMMISSION

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

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

9a) The consignee, Japan Nuclear Fuel Limited, will use Uranium reference materials to prepare large size dried (LSD) spikes and other reference samples. The LSD spikes will be used at the Rokkasho Re-processing Plant and JNFL MOX Fuel Fabrication Plant in Rokkasho for the Isotope Dilution Mass Spectrometry (IDMS) method, which is adopted as the facility's material accountancy analysis. These materials are used for calibrating the measurement techniques used at the plants.





XSNM 3485/0/ //0 05675 February 22, 2008

Scott Moore, Deputy Director Office of International Programs U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

SUBJECT: LICENSE AMENDMENT TO NRC LICENSE XSNM3485

Dear Mr. Moore:

Enclosed is a completed NRC Form 7 for exporting materials to Japan Nuclear Fuel Ltd (JNFL). This is an amendment to an existing license (XSNM3485). JNFL uses enriched uranium metal reference materials from New Brunswick Laboratory (NBL) to produce large size dried spikes (LSDs) for use at two facilities in Rokkasho, Japan. The first facility is the Rokkasho Reprocessing Plant, and the second is the J-MOX Fuel Fabrication Plant. The Reprocessing Plant is currently active and is reprocessing spent nuclear fuel under full International Atomic Energy Agency (IAEA) safeguards. The J-MOX (mixed oxide fuel fabrication facility, colocated next to the reprocessing plant) is under construction and will be under full IAEA safeguards when operational, expected in 2010.

The LSDs that are produced using NBL's HEU metal are used in establishing accountancy values for uranium and plutonium in input and output streams. The IAEA Safeguards Analytical Laboratory produces similar materials for independent verification of the Japanese declared values, and under an existing Department of Energy/Japan Atomic Energy Agency (JAEA) agreement, the New Brunswick Laboratory is assisting the Japanese in quality control and assurance associated with the reference material use and production. Because the reprocessing plant is operating at near full capacity, JNFL has a continuing need for approximately 20-30 grams of HEU metal per year. Therefore, NBL is seeking a 5 year license amendment.

Because of the continuing operation of the reprocessing facility, and the importance of these reference materials both to JNFL and the international safeguards community (DOE, IAEA), we respectfully request that this license amendment be processed as quickly as possible.

If you have any questions concerning this, please feel free to contact me at (630) 252-2446.

Best regards,

Jon W. Neuhoff, Laboratory Director

Jon W. Neutr

cc:

Usha Narayanan, NBL Peter Mason, NBL Heidi Williams, NBL

Robin Barnes

From:

Williams, Heidi [Heidi.Williams@ch.doe.gov]

Sent:

Monday, March 03, 2008 4:31 PM

To:

Carlotta Coates Robin Barnes

Cc: Subject:

License XSNM3485 Amendment Clarifications

XSNM3485/01

Dear Ms. Coates.

To clarify a few points we discussed earlier today regarding the proposed amendments to license XSNM3485, below is a break-down of the information contained in the original license versus the information contained in the proposed license amendment.

Original: June 30, 2008 expiration date

Amendment: December 31, 2013 expiration date (extended for 5 years)

Original: Freight forwarder indicated.

Amendment: No freight forwarder indicated.

Original: Natural Uranium as Solid, Metal, 200 g and High Enriched Uranium as Solid, Metal, 38.4 g, 93% enriched, 35.7 g U-235

Amendment: No Natural Uranium, only High Enriched Uranium as Solid, Metal, 240 g, 97% enriched, 233 g U-235 Currently, JNFL has estimated a need for approximately 20-30 g HEU metal per year. However, their material needs may increase once the MOX Fuel Fabrication Plant is complete. Also, the demand for material may increase somewhat if production efficiencies are implemented, requiring the consumption of more HEU metal reference materials. Therefore, for this amendment we are conservatively estimating a total of 240 grams of HEU metal over five years (or about 47 grams per year) to address possible future demand increases. Additionally, we are requesting up to 97% enrichment because NBL will be producing a replacement HEU metal standard in FY2008/2009 and we do not have an exact enrichment figure for the new metal from our supplier. NBL estimates the replacement standard will be approximately 94% U-235, but chose a conservative figure of up to 97% enriched.

Original: The consignee, Japan Nuclear Fuel Limited, will use the material at the Rokkasho Re-processing Plant. Amendment: The consignee, Japan Nuclear Fuel Limited, will use the material at the Rokkasho Re-processing Plant and the MOX Fuel Fabrication Plant, which is co-located next to the Re-processing Plant, currently under construction, and expected in 2010.

I hope this break-down makes the proposed changes more clear. If you have any questions, please do not hesitate to contact me. We are working on the \$16,800 payment and should have it processed by the end of this week. I will keep you informed.

Thanks and best regards,

Heidi Williams U.S. Department of Energy New Brunswick Laboratory

Tel: 630-252-2767 Fax: 630-252-4146

E-mail: heidi.williams@ch.doe.gov or usdoe.nbl@ch.doe.gov

Visit our website at: http://www.nbl.doe.gov/