

ENERGYSOLUTIONS

Commercial Processing Division 1560 Bear Creek Road Oak Ridge, TN 37831 865 481-0222

January 26, 2009

Mr. Scott Moore
Deputy Director - Office of International Programs
US Nuclear Regulatory Commission
Mail Stop 4E21
Washington, DC 20555

Dear Mr. Moore:

In accordance with instructions in 10 CFR 110.4 we are providing the attached NRC Form 7 as notification of EnergySolutions' intent to export empty containers to Bruce Power Station in Ontario, Canada.

These are reusable containers dedicated to radioactive materials shipments and the interiors are surficially contaminated, albeit at very low levels. The containers are being exported under the General License for Export provisions of 10 CFR 110.-21(e), 22(a), and 23(c) for Special Nuclear Material, Source Material, and By-Product Material. The loaded containers will subsequently be collected by Monserco (a licensed Canadian broker) and eventually shipped to EnergySolutions' Oak Ridge, TN processing facility as authorized by IW017.

Contact me if additional information or clarification is required.

Respectfully,



Philip Gianutsos, CHP
Radiation Safety Officer
Commercial Processing Division

NM
12200
01-29-09

Attachments:
NRC Form 7

cc: Mr. Tim Ryder, Monserco

NRC FORM 7 (8-2007) 10 CFR 110		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB: NO. 3150-0027		EXPIRES: 06/30/2009	
APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL (See Instructions on Page 5)				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 infocollects@nrc.gov, 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.			
PART A. FOR NRC USE ONLY		<input checked="" type="checkbox"/> PUBLIC OR <input type="checkbox"/> NON-PUBLIC		DATE RECEIVED 01-29-09			
LICENSE NUMBER		DOCKET NUMBER		ADAMS ACCESSION NUMBER			
PART B. TO BE COMPLETED FOR ALL 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.)							
1. NAME AND ADDRESS OF APPLICANT/LICENSEE EnergySolutions 1560 Bear Creek Rd Oak Ridge, TN 37831		1a. NAME OF APPLICANT'S CONTACT Philip Gianutosos		1b. APPLICANT'S REFERENCE NUMBER ---N/A---			
		1c. PHONE NUMBER 865 220-1478		1d. FAX NUMBER 865 220-1668			
		1e. E-MAIL ADDRESS pgianutosos@energysolutions.com					
2. TYPE OF NRC LICENSE REQUESTED (Check One)							
<input type="checkbox"/> EXPORT (Parts B, C, E)		<input checked="" type="checkbox"/> NOTIFICATION OF EXPORT OF INCIDENTAL RADIOACTIVE MATERIAL (PART C.E)		<input type="checkbox"/> IMPORT (Parts B, D, E)		<input type="checkbox"/> COMBINED EXPORT/IMPORT (Parts B, C, D, E)	
<input type="checkbox"/> AMENDMENT/RENEWAL Existing License Number:							
3. CONTRACT NUMBER(S) RWSA dated 10/17/07		4. FIRST SHIPMENT DATE 1/27/09		5. LAST SHIPMENT DATE 12/31/09		6. PROPOSED EXPIRATION DATE ---N/A---	
PART C. TO BE COMPLETED FOR EXPORT 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.)							
7. NAME(S) / ADDRESS(ES) OF SUPPLIERS AND/OR OTHER PARTIES TO THE EXPORT EnergySolutions 1560 Bear Creek Rd Oak Ridge, TN 37831		8. NAME(S) / ADDRESS(ES) OF INTERMEDIATE FOREIGN CONSIGNEE(S) ---NONE---		9. NAME(S) / ADDRESS(ES) OF ULTIMATE FOREIGN CONSIGNEE(S) Bruce Power Inc. Building B10, 177 Tie Road Municipality of Kincardine R.R #2 Tiverton, Ontario NOG 2T0 Contact: Kurt Wigle Ph: 519-361-2673 ext. 3745			
7a. LIST FUNCTIONS PERFORMED/SERVICE PROVIDED Empty, reusable containers provided by EnergySolutions to Bruce Power.		8a. INTERMEDIATE USE(S) ---NONE---		9a. ULTIMATE END USE(S) The containers are for use by Bruce Power for packaging of radioactive material. A licensed Canadian broker (Monserco) will eventually return the containers to Oak Ridge, TN, as authorized by IW017.			
10. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES, EQUIPMENT, OR COMPONENTS: FOR NUCLEAR EQUIPMENT INCLUDE TOTAL DOLLAR VALUE OF EQUIPMENT FOR EXPORT Up to 50 cargo containers will be shipped to consignees listed in the Additional Information Sheet. The cargo containers consist of nominal 8'x8'x20' cargo containers each weighing approximately 5500 kgs (12,000 pounds) and containing empty metal boxes for waste packaging. Incidental radioactive material is present as contamination on the interior surfaces of the cargo containers and metal boxes. The contamination is predominantly byproduct material, with traces of source and special nuclear material. All radioactive material is in the form of solid metal oxides. See attached page for quantities of Appendix L materials. Several Appendix P radionuclides will be present, with each shipment << 0.1% of the Category 2 limit (calculation is also presented in attachment)		10a. MAX TOTAL VOLUME/ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq) Total for 50 containers: Approx 0.025 TBq (0.663 Ci) of byproduct material. Approx 0.134 kgs of source Material < 0.02 grams of SNM (Pu)		10b. MAX ENRICHMENT OR WGT % No enriched U		10c. MAX ISOTOPE WGT (KG) Total for 50 containers: PU-238 2.47E-9 PU-239 3.05E-6 PU-240 3.26E-9 PU-241 4.00E-9 PU-242 4.04E-6	
11. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME) -----NONE-----							

*nm
Rec'd
01-29-09*

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

LICENSE NUMBER	DOCKET NUMBER	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 -----N/A-----	13. NAME(S) / ADDRESS(ES) OF INTERMEDIATE CONSIGNEE(S) -----N/A-----	14. NAME(S) / ADDRESS(ES) OF ULTIMATE CONSIGNEE(S) -----N/A-----
12a. NRC EXPORT LICENSE NUMBER(S) (if applicable) -----N/A-----	13a. LICENSE NUMBER(S) / EXPIRATION DATE(S) -----N/A-----	14a. LICENSE NUMBER(S) / EXPIRATION DATE(S) -----N/A-----
	13b. INTERMEDIATE USE(S) -----N/A-----	14b. INTERMEDIATE USE(S) -----N/A-----
15. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES -----N/A-----	15a. MAX TOTAL VOLUME/ ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq) -----N/A-----	15b. MAX ENRICHMENT OR WGT % -----N/A-----
		15c. MAX ISOTOPE WGT (KG) -----N/A-----

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 PAGE 3 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 Philip Gianutsos, CHP Radiation Safety Officer	18b. SIGNATURE - AUTHORIZED OFFICIAL 	18c. DATE 01/26/09
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Handwritten notes:
 NM
 used
 01/26/09

NRC FORM 7
(8-2007)
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)

For blocks 10, 10a-10c:

Activity is scaled from current empty container isotopic distribution and is representative of containers to be exported.

Radiological Content		
Activity Nuclide	20' empty seavan MBq	mCi
AC-228	3.428E-03	9.265E-05
AG-110	4.473E-01	1.209E-02
AM-241	1.196E-01	3.233E-03
BI-214	1.613E-03	4.359E-05
C-14	5.238E-01	1.416E-02
CE-144	5.811E-02	1.571E-03
CM-243	7.371E-03	1.992E-04
CM-244	6.537E-03	1.767E-04
CO-58	7.509E+00	2.029E-01
CO-60	6.693E+01	1.809E+00
CR-51	1.254E+00	3.388E-02
CS-134	4.553E-01	1.231E-02
CS-137	5.194E+00	1.404E-01
EU-152	1.694E-03	4.579E-05
FE-55	2.471E+02	6.679E+00
FE-59	8.129E-01	2.197E-02
H-3	1.041E+02	2.815E+00
I-125	4.277E-01	1.156E-02
MN-54	1.750E+01	4.731E-01
NB-95	1.325E+00	3.582E-02
NI-59	1.530E+00	4.136E-02
NI-63	2.112E+01	5.709E-01
PM-146	9.435E-04	2.550E-05
PU-238	3.111E-02	8.409E-04
PU-239	1.398E-01	3.777E-03
PU-240	5.550E-04	1.500E-05
PU-241	2.961E-01	8.003E-03
PU-242	1.166E-02	3.150E-04
SB-125	6.725E-01	1.818E-02
SN-113	3.013E-02	8.144E-04
SR-90	3.474E-01	9.389E-03
TC-99	3.722E-02	1.006E-03
TH-230	1.613E-03	4.359E-05
TH-234	3.239E-01	8.753E-03
TL-208	7.052E-04	1.906E-05
U-233	4.130E-02	1.116E-03
U-234	1.547E+00	4.181E-02
U-235	1.494E-03	4.037E-05
U-236	6.487E-02	1.753E-03
U-238	3.323E-02	8.980E-04
ZN-65	9.696E+00	2.621E-01
ZR-95	4.480E-01	1.211E-02
Total	4.903E+02	1.325E+01

	TBq	Ci
Single Seavan	4.903E-04	1.325E-02
50 20' seavans	2.451E-02	6.625E-01

Special Nuclear Material & Source Material		
	20' seavan SNM (gms)	SM (kgs)
PU-238	4.946E-08	
PU-239	6.093E-05	
PU-240	6.522E-08	
PU-241	8.003E-08	
PU-242	8.077E-05	
TH-230		2.076E-09
TH-234		3.806E-13
U-233	1.151E-04	
U-234	No Enriched Uranium	6.743E-06
U-235		
U-236		2.697E-05
U-238		2.641E-03
Total	2.570E-04	2.675E-03

kg source material X50 1.337E-01

U enrichment 6.882E-03

APPENDIX P EVALUATION			
nuclide	20' activity, MBq	App P, Cat 2 limit MBq	1 empty 20' sealand (fraction of limit)
AM-241	1.196E-01	6.000E+05	1.994E-07
CM-244	6.537E-03	5.000E+05	1.307E-08
CO-60	6.693E+01	3.000E+05	2.231E-04
CS-137	5.194E+00	1.000E+06	5.194E-06
Pu-238	3.111E-02	6.000E+05	5.186E-08
SR-90	3.474E-01	1.000E+07	3.474E-08
shipment of 2 20' seavans, sum of fractions			4.572E-04

*REC'D
M/M
01-29-09*