EXPIRES: 08/31/2012

NRC FORM 7 (3-2010) 10 CFR 110  APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL		Estimat is rev are sa Service or by ir	APPROVED BY OMB: NO. 3150-0027  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, Commission, Washington, Commission, Washington, Commission, Washington, Commission, Washington, Affairs, NEOB-10202, (3150-0027), Office of Management and Budget, Washington, Commission, Washington, Commission, Washington, Commission, Washington, Affairs, NEOB-10202, (3150-0027), Office of Management and Budget, Washington, Commission, Washington					
(See Instructions on Page 5)		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	PUBLIC OR	□ NON-PUBLIC	的。 1. 10 10 10 10 10 10 10 10 10 10 10 10 10				NOV 03 2010	
LICENSE NUMBER  1W029	DOCKET NUMB		96 ADAMS ACCESSION NUMBER					
PART B. TO BE COMPLETED FOR <u>ALL</u> 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.)								
NAME AND ADDRESS OF APPLICANT/LICENSEE     Energy Solutions     1560 Bear Creek Rd     Oak Ridge, TN 37831		1a. NAME OF APPLICANT'S CONTACT 1b.			1b. /	b. APPLICANT'S REFERENCE NUMBER N/A		
						1d. FAX NUMBER 865 220-1668		
		1e. E-MAIL ADDRESS pgianutsos@energysolutions.com						
2. TYPE OF NRC LICENSE REQUESTED (Check One)    EXPORT								
3. CONTRACT NUMBER(S)	4. FIRST SHIPME January 1, 2011	NT DATE		SHIPMENT DATE er 31, 2016		PROPOSED EXPIRA ecember 31, 2016	TION DATE	
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		8. NAME(S) / ADDRESS(ES) OF INTERMEDIATE FOREIGN CONSIGNEE(S)			ATE .	9. NAME(S) / ADDRESS(ES) OF ULTIMATE FOREIGN CONSIGNEE(S)		
Energy <i>Solutions</i> 1560 Bear Creek Rd Oak Ridge, TN 37831		NONE				Contact: Wilhelm Wartenberg Eckert & Ziegler Nuclitec GmbH Gieselweg 1 38110 Braunschweig Germany Tel.: +49 5307 932 142 Fax: +49 5307 932 341		
7a. LIST FUNCTIONS PERFORMED/SERVICE PROVIDED		8a. INTERMEDIATE USE(S)			$\neg$	9a. ULTIMATE END USE(S)		
Volume reduction by incineration of dry active material. Return of non-incineables and/or non-conforming material.		none				Storage or disposal by the original generator, as required or authorized by their regulator.		
10. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOU NUCLEAR FACILITIES, EQUIPMENT, OR COMPONENTS; FOR NUCLEAR EQUIPMENT INCLUDE TOTAL DOLLAR VALUE OF EQUIPMENT FOR EXPORT  Hearth ash from the incineration of dry active material. Exported material may a include non-incinerable or non-conforming material identified during inspection incineration. Material to be packaged in containers acceptable for transportation accordance with USDOT and IAEA regulations.			ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq)  Not to exceed 9.0E+05 kg. See Addendum 1 for additional information.		OR V	MAX ENRICHMENT VGT % chment not expected to ed 10%.	10c. MAX ISOTOPE WGT (KG) Not to exceed 350 grams SNM.	
11. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME)  Germany  NOV 0 3 2010								

U.S. NUCLEAR REGULATORY COMMISSION

NRC FORM 7 (3-2010) 10 CFR 110

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

LICENSE NUMBER Q DOCKE	ET NUMBER 0 /	ADAMS A	CCESSION NUMBER	PUBLIC C	OR NON-PUBLIC		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	05876	T ONLY O	R COMBINED LICENSES,	ATTACAMENT PROPERTY.	自然是 100 100 100 100 100 100 100 100 100 10		
(If more space is neede	ed to complete any of the	ne items, use	Pages 3-4 first, and then attack	additional sheets, in	iecessary.)		
12. NAME(S) / ADDRESS(ES) OF FOREIG SUPPLIERS AND/OR OTHER PARTIES	N 13. NAME(S CONSIGNE	(a) / ADDRES	S(ES) OF INTERMEDIATE	14. NAME(S) / ADDI CONSIGNEE(S)	RESS(ES) OF ULTIMATE		
TO IMPORT Wilhelm Wartenberg				Philip Gianuts			
Eckert & Ziegler					EnergySolutions 1560 Bear Creek Rd		
Nuclitec GmbH	N	N/A					
Gieselweg 1				Oak Ridge, Th			
38110 Braunschweig				865 220-1478	1		
Germany					- 1		
Tel.: +49 5307 932 142							
Fax: +49 5307 932 341							
12a. NRC EXPORT LICENSE NUMBER(S)	13a LICENS	E NUMBER(S	S) / EXPIRATION DATE(S)	14a. LICENSE NUME	BER(S) / EXPIRATION DATE(S)		
(if applicable)			o,, 2,4 ii 0 (110) 2 (11)				
Application for export license for the return of a		I/A		Brauschweig:	ing radioactive waste at site		
applied for with this application				4/06 Han (dated 03.March 2006),			
				1	nse 11/04 (dated 05. July		
				2004) No expiry date			
				Issued by Gewer	beaufsichtsamt		
				Braunschweig, G	ermany		
				License for intern	nediate storage of		
-   -				radioactive waste			
					' -007 (dated 29 Dec 2008)		
				No expiry date	beaufsichtsamt Leese,		
				Germany	beautoionibariti Lecoo,		
	13b. INTERI	MEDIATE US	E(S)	14b. INTERMEDIATE	E USE(S)		
		V/A		N/A			
15. DESCRIPTION OF RADIOACTIVE MA NUCLEAR FACILITIES	TERIALS, SEALED SO	OURCES,	15a. MAX TOTAL VOLUME/ ELEMENT WGT (KG), OR	15b. MAX ENRICHM OR WGT %	IENT 15c. MAX ISOTOPE WGT (KG)		
			TOTAL ACTIVITY (TBq)				
Dry active material for incineration. See Addendur	n 2 for additional information	on	Not to exceed 9.0E+05 kg.	Enrichment not experence exceed 10%.	grams SNM.		
			See Addendum 1 for additional information.				
		+					
16. FOREIGN OBLIGATIONS (BY COUNT	RY AND BY PERCEN	TAGE OF MA	AXIMUM TOTAL VOLUME)				
	O BE COMPLETED	o for <u>all</u>	LICENSES, AMENDMEN	TS, OR RENEWAL	S		
17. ADDITIONAL INFORMATION		17a CODIEC	OF PECIDIENTS				
PROVIDED ON PAGES 3, 4,  YES NO 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 18b. SIGNATURE – AUTHORIZED OFFICIAL 18c. DATE							
Philip Gianutsos, CHP Radiation Safety Officer  August 27, 2010			August 27, 2010				
Philip Gianutsos, CHP Radiation Safety Officer  August 27, 2010  August 27, 2010							

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NRC FORM 7	
(3-2010)	
10 CFR 110	

APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL (Continued) ADAMS ACCESSION NUMBER LICENSE NUMBER 9 DOCKET NUMBER 96 PUBLIC OR NON-PUBLIC ADDITIONAL INFORMATION (Reference applicable block numbers from page 1 and/or page 2 for each entry) See attached Addendums 1 and 2. Rec'd NOV 03 2010

#### **ATTACHMENT 3**

# PART 110 IMPORT APPLICATION ADDENDUM

It is Duratek's intention to import dry active material for purposes of volume reduction through incineration. The incineration process will be campaigned to allow for segregation of the resultant ash, proper repackaging of the ash, and return of the ash in accordance with a NRC issued export permit

## 1) Name and Address of Applicant (10 CFR 110.32(a))

Duratek Services, Inc.
Bear Creek Operations
1560 Bear Creek Road
Oak Ridge, TN 37831-2530
Contact: Philip Gianutsos
Phone Number 865-220-1478.
E-mail pgianutsos@energysolutions.com

### 2) Name and Address of Supplier of the Material (10 CFR 110.32 (b))

Contact: Wilhelm Wartenberg Eckert & Ziegler Nuclitec GmbH Gieselweg 1 38110 Braunschweig Germany

Tel.: +49 5307 932 142 Fax: +49 5307 932 341

### 3) County of Origin (10 CFR 110.32(c))

Germany

## 4) Ultimate Consignee (10 CFR 110.32 (d))

Duratek Services, Inc
Bear Creek Operations
1560 Bear Creek Road
Oak Ridge, TN 37831-2530
Contact: Philip Gianutsos
Phone Number 865-220-1478.
E-mail pgianutsos@energysolutions.com

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### 5) Dates of Proposed First and Last Shipment (10 CFR 110.32(e))

Shipments are expected between 2011 and 2016.

Rec'd NOV 03 2010 Shipments of material will not be imported under this proposed US import license until EZN has obtained all necessary permits for export and import from Germany.

## 6) Description of the Material (10 CFR 110.32(f)( 1 and 5))

The material to be imported consists of up to 1000 tons (900 tonnes) of incinerable dry active material.

The radionuclides in the contamination over the duration of the proposed license will not exceed the following limits which are consistent with the possession limits of Duratek's Tennessee licenses (R-73008 and R-73016) which authorize the following amounts:

Radionuclides	<u>Ci/TBq</u>			
H-3	400/14.8			
C-14	200/ 7.4			
Ra-226	20/0.74			
Th-232	20/0.74			
Po-210	10/0.37			
U natural/depleted	200/ 7.4			
U-other but not				
233,235,or 238	2/0.07			
At# 3-83(Total)	800/29.6			
At# 84-91(Total)	2.5/0.09			
TRU	2.5/0.09			
Am-241	250/ 9.3			
Fe-55	1000/ 37			
SNM, 235U equivalent	350 grams (Duratek does not expect the enrichment			
level to exceed 10% by weight)				

The chemical and physical form of the above isotopes may be in any form suitable for transport under US DOT regulations. This is the limitation in Duratek's Tennessee licensees.

It is expected that the imports will involve numerous shipments during the term of the license. No one shipment will exceed the values found in 10 CFR Part 110, Appendix P, Table I, Category 2. In addition, no one shipment will exceed 10 percent of the above possession limits of Duratek's current State of Tennessee Agreement State licenses.

Shipments may include one or more packages of material. However, the quantities of radioactive material in any one package will not exceed the Table A<sub>2</sub> values of 49 CFR 173.435.

Imported material will not include mixed waste (mixed hazardous and radioactive waste constituents) as defined under the Resource Conservation and Recovery Act.

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#### 7) Route of Shipments (10 CFR 110.32(f)(5))

The expected route of imports is by ocean vessel from Germany to the port at Portsmouth and/or Norfolk, Virginia. Transportation will continue via truck from the port of entry at Portsmouth primarily by interstate highway to TN route 95 or 58 to Bear Creek Road.

## 8) Ultimate Disposition of the Material (10 CFR 110.32(f)(5) and (6))

The imported material will be possessed and incinerated in the United States in accordance with Duratek's Tennessee Agreement State License Number R-73016, as amended and renewed from time to time and other Duratek Tennessee licenses. Duratek will only import radioactive material if its Tennessee license is current or in timely renewal status.

Specifically, the material will be processed as follows:

- a) Imported material will be removed from shipping containers
- b) Material will be sorted and inspected for non-incinerable and any non-conforming materials.
- c) Any non-incinerable and non-conforming waste will be repackaged for ultimate return in accordance with a specific export permit.
- d) Acceptable incinerable material will be placed in incinerator boxes and fed to the incinerator in a dedicated campaign. No domestic or waste of international origin not specifically imported under the provisions of this import permit will be co-mingled with this waste.
- e) The hearth ash generated from the dedicated campaign will be collected in appropriate packages and prepared for export back to EZN in accordance with the NRC issued specific export permit.

#### Waste

Any imported material that is not processed in accordance with Tennessee license conditions will be returned to EZN under the proposed export license which is associated with this application.

Residual radioactive material from processing the imported material such as floor sweepings, booties, slag, etc which is attributable to Duratek under its Tennessee license, as amended from time to time, will be disposed of in accordance with Duratek's procedures and applicable license conditions and permits

As noted under Section 5, above, Duratek will not import material until EZN has obtained all necessary import licenses and approvals to accept the return of any waste associated with the material imported to the US under this proposed license. This is also consistent with Duratek's Tennessee license condition that requires in contracts with international customers the following language:

Customer understands and acknowledges that Duratek must, in accordance with its Tennessee Radioactive Materials licensees, retain the right to return Radioactive Waste (processed or unprocessed) to the generator. Therefore, Customer hereby represents,

IW029

warrants and promises that it has the legal right and ability to accept, and will accept the return of Radioactive Waste (processed or unprocessed) to the generator facility. In addition, Customer represents, warrants, and promises that it has written assurance from the appropriate Radiological Control competent authority for such return of radioactive waste. Customer agrees to provide Duratek, upon request, written evidence of its ability to accept any returned Customer radioactive waste in accordance with this Article.

This approach for waste has been discussed with and accepted by the Tennessee Department of Health and Environment, Division of Radiological Health. Processing performed in accordance with Duratek's radioactive materials licenses requires no additional authorization beyond the NRC import and export licenses.

## 9) Justification of License (10 CFR 110.32(f)(7))

The dates for shipment will be based on the contract arrangements for individual shipments. The material imported under this license will be incinerated and returned to EZN in an effort to reduce the volume of radioactive material currently in storage as well as future arisings. It will also assist in maintaining the US competitive advantage in waste management and decommissioning. It is consistent with international conventions entered into by the United States.

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Rec'd

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1560 Bear Creek Road
Oak Ridge, Tennessee 37831
phone 865-481-0222 fax 865-482-7206
www.duratekinc.com

August 27, 2010

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

XW018 IW029 Rec'd

Reco NOV 03 2010

Subject: Combined Applications for the Export/Import of Radioactive Material

Dear Mr. Moore:

Duratek Services, Inc. requests a specific license to import radioactively contaminated dry active waste from Germany to Duratek's facility in Oak Ridge, Tennessee for incineration under Duratek's Tennessee licenses. Duratek also requests a specific license to authorize the export of the resultant ash from this incineration back to Germany.

This license is to allow the importation of up to 1,000 tons (900 tonnes) of radioactively contaminated dry active incinerable material. The source of this material is Eckert & Ziegler Nuclitec. Eckert & Ziegler Nuclitec (EZN) provides a range of services to the European nuclear industry related to the collection, transportation, processing, storage and disposal of radioactive waste including liquids, solid combustibles, non-combustibles and short or long-lived and high or low-activity radioactive materials. Eckert & Ziegler Nuclitec specializes in the collection and conditioning of radioactive waste from hospitals, research and technical facilities.

At present the EZN Facility is near capacity and is investigating various volume reduction techniques, including incineration, to reduce the volume currently stored and minimize future storage volumes.

The purpose of the import license is to import incinerable material from EZN, incinerate the material at Duratek's Bear Creek Facility in dedicated burns maintaining proper segregation of resultant waste, and packaging the ash in appropriate containers for export back to the EZN Facility in Germany.

The combined export/import application is attached. Also attached is the addendum containing additional information supporting the export/import application. We assume NRC will appropriately delete possession limit information in the interest of materials security prior to making these documents publicly available. We are enclosing a check in the amount of \$19,600 to address the fees for two applications specified in 10 CFR

# Combined Applications for the Export/Import of Radioactive Material

Page two

170.31, Category 15 B., assuming Executive Branch, but not Commission review, is required for each application.

If you have any questions or need additional information, please do not hesitate to call me at 865-220-1478.

Respectfully Submitted,

Philip Gianutsos, CHP

Radiation Safety Officer Duratek Services, Inc.

#### Attachments:

- 1) Export/Import Application (Form 7)
- 2) Export Application Addendum
- 3) Import Application Addendum

XW018 IW029

NOV 03 2010



November 2, 2010

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

Dear Mr. Moore:

On August 27, 2010, EnergySolutions submitted NRC Form 7 applications for specific import and export licenses for work with a client in Germany. A check in the amount of \$19,600 was submitted for the application fees, and we were subsequently notified that we used a fee schedule that had been superseded. Enclosed is a check for an additional \$200.00 to correct our error. We apologize for the error and associated delay.

Contact me if additional information or clarification is required.

Respectfully,

Philip Gianutsos, CHP Radiation Safety Officer

Commercial Processing Division

cc: Mr. Thomas Magette, EnergySolutions

Rec'd NOV 03 2010

JC