NRC FORM 7 (3-2010) 10 CFR 110 — U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL

(See Instructions on Page 5)

APPROVED BY OMB: NO. 3150-0027 — EXPIRES: 08/31/2012

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PART A. FOR NRC USE ONLY	☑ PUBLIC OR ☐ NON-PUBLIC	DATE RECEIVED Rec'd NOV 03 2010 JC
LICENSE NUMBER IW029	DOCKET NUMBER 11005896	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	1a. NAME OF APPLICANT'S CONTACT	1b. APPLICANT'S REFERENCE NUMBER
EnergySolutions 1560 Bear Creek Rd Oak Ridge, TN 37831	Philip Gianutsos	---N/A---
	1c. PHONE NUMBER 865 220-1478	1d. FAX NUMBER 865 220-1668
	1e. E-MAIL ADDRESS pgianutsos@energysolutions.com	

2. TYPE OF NRC LICENSE REQUESTED (Check One)

☐ EXPORT (Parts B, C, E) ☐ NOTIFICATION OF EXPORT OF INCIDENTIAL RADIOACTIVE MATERIAL (PART C,E) ☐ IMPORT (Parts B, D, E) ☒ COMBINED EXPORT/IMPORT (Parts B, C, D, E) ☐ AMENDMENT/RENEWAL

3. CONTRACT NUMBER(S)	4. FIRST SHIPMENT DATE	5. LAST SHIPMENT DATE	6. PROPOSED EXPIRATION DATE
	January 1, 2011	December 31, 2016	December 31, 2016

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	8. NAME(S) / ADDRESS(ES) OF INTERMEDIATE FOREIGN CONSIGNEE(S)	9. NAME(S) / ADDRESS(ES) OF ULTIMATE FOREIGN CONSIGNEE(S)
EnergySolutions 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)	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 SOURCES, NUCLEAR FACILITIES, EQUIPMENT, OR COMPONENTS; FOR NUCLEAR EQUIPMENT INCLUDE TOTAL DOLLAR VALUE OF EQUIPMENT FOR EXPORT	10a. MAX TOTAL VOLUME/ ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq)	10b. MAX ENRICHMENT OR WGT %	10c. MAX ISOTOPE WGT (KG)
Hearth ash from the incineration of dry active material. Exported material may also include non-incinerable or non-conforming material identified during inspection prior to incineration. Material to be packaged in containers acceptable for transportation in accordance with USDOT and IAEA regulations.	Not to exceed 9.0E+05 kg. See Addendum 1 for additional information.	Enrichment not expected to exceed 10%.	Not to exceed 350 grams SNM.

11. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME)
Germany

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U.S. NUCLEAR REGULATORY COMMISSION

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

LICENSE NUMBER	DOCKET NUMBER	ADAMS ACCESSION NUMBER	☑ PUBLIC OR ☐ NON-PUBLIC
IW029	11005896		

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) / ADDRESS(ES) OF INTERMEDIATE CONSIGNEE(S)	14. NAME(S) / ADDRESS(ES) OF ULTIMATE CONSIGNEE(S)
Wilhelm Wartenberg Eckert & Ziegler Nuclitec GmbH Gieselweg 1 38110 Braunschweig Germany Tel.: +49 5307 932 142 Fax: +49 5307 932 341	----------N/A----------	Philip Gianutsos, RSO Energy*Solutions* 1560 Bear Creek Rd Oak Ridge, TN 37831 865 220-1478
12a. NRC EXPORT LICENSE NUMBER(S) (if applicable) Application for export license for the return of ash applied for with this application	13a. LICENSE NUMBER(S) / EXPIRATION DATE(S) ----------N/A----------	14a. LICENSE NUMBER(S) / EXPIRATION DATE(S) License for handling radioactive waste at site Brauschweig: 4/06 Han (dated 03.March 2006), provenience license 11/04 (dated 05. July 2004) No expiry date Issued by Gewerbeaufsichtsamt Braunschweig, Germany License for intermediate storage of radioactive waste at site Leese: H060011462-007 -007 (dated 29 Dec 2008) No expiry date Issued by Gewerbeaufsichtsamt Leese, Germany
	13b. INTERMEDIATE USE(S) ----------N/A----------	14b. INTERMEDIATE USE(S) ----------N/A----------

15. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES	15a. MAX TOTAL VOLUME/ ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq)	15b. MAX ENRICHMENT OR WGT %	15c. MAX ISOTOPE WGT (KG)
Dry active material for incineration. See Addendum 2 for additional information	Not to exceed 9.0E+05 kg. See Addendum 1 for additional information.	Enrichment not expected to exceed 10%.	Not to exceed 350 grams SNM.

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 PAGES 3, 4, AND/OR ON SEPARATE SHEETS?	☒ YES ☐ NO	17a. COPIES OF RECIPIENTS' AUTHORIZATIONS PROVIDED?	☐ YES ☒ NO

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	Phil Gianutsos	August 27, 2010

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U.S. NUCLEAR REGULATORY COMMISSION

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

See attached Addendums 1 and 2.

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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.

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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	Ci/TBq
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_2 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.

<u>Waste</u>

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,

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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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Duratek™

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

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August 27, 2010

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

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

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

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ENERGYSOLUTIONS

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

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1560 Bear Creek Road • Oak Ridge, TN 37831
865.481.0222 • Fax: 865.482.7206 • www.energysolutions.com