| | | | | | | Page 1 of 3 | |
|---|-------------------------------------|---|--|---|------------------|---|---|
| | FOUL ATOPY COMME | | VED BY OM | B: NO. 3150-0027 | - | | EXPIRES: 08/31/2012 |
| NRC FORM 7 (3-2010) 10 CFR 110 APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL (See Instructions on Page 5) | | Estimati is revi are sa Service or by in Affairs, DC 200 OMB c | ed burden pe iewed to e atisfied. Send is Branch (7 tternet e-mail NEOB-102 503. If a me control numb | r response to comply w nsure that the app d comments regardin -5 F52), U.S. Nuclea to infocollects@nrc.gov 202, (3150-0027), | ar Reg office | den estimate to the F gulatory Commission, Wa o the Desk Officer, Office o of Management an umation collection does n | est: 2.4 hours. This submittal and policy considerations tecords and FOIA/Privacy shington, DC 20555-0001, f Information and Regulatory d Budget, Washington, ot display a currently valid person is not required to |
| PART A. FOR NRC USE ONLY | | DATE RECEIVED | | | | | NOV 03 2010 |
| LICENSE NUMBER | DOCKET NUMBE | 5896 | 96 ADAMS ACCESSION NUMBER | | | | |
| PART B. | TO BE COMPLET | ED FOR ALL | E Pages 3-4 | ES, AMENDMENT | rs, o | R RENEWALS itional sheets, if necess | ary.) |
| 1. NAME AND ADDRESS OF APPLICAN Energy Solutions | | | | | 1b. | 1b. APPLICANT'S REFERENCE NUMBER | |
| 1560 Bear Creek Rd | T T | | | | | 1d. FAX NUMBER 865 220-1668 | |
| Oak Ridge, TN 37831 | | 1e. E-MAIL ADDRESS pgianutsos@energysolutions.com | | | | | |
| 2. TYPE OF NRC LICENSE REQUESTED (Check One) EXPORT (Parts B, C, E) (Parts B, C) (Parts B, C) (Parts B, C) (Parts B, C) (Par | | | E) (| COMBINED EXPOR Parts B, C, D, E) | | _ | IENT/RENEWAL |
| 3. CONTRACT NUMBER(S) | 4. FIRST SHIPMEN January 1, 2011 | IT DATE | | SHIPMENT DATE er 31, 2016 | | 6. PROPOSED EXPIRA December 31, 2016 | TION DATE |
| PART C. TO BE COMP | LETED FOR EXP | ORT ONLY C | RCOMB | NED LICENSES, | AME | NDMENTS, OR REI | NEWALS |
| AND/OR OTHER PARTIES TO THE EXPORT | | 8. NAME(S) / ADDRESS(ES) OF INTERMEDIATE FOREIGN CONSIGNEE(S) NONE | | | | | |
| | | | | | | | |
| 7a. LIST FUNCTIONS PERFORMED/SERVICE PROVIDED Volume reduction by incineration of dry active material. Return of non-incineables and/or non-conforming material. | | 8a. INTERMEDIATE USE(S) | | | | 9a. ULTIMATE END USE(S) Storage or disposal by the original generator, as required or authorized by their regulator. | |
| DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOL 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. | | OR F may also iction prior to rtation in | ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq) Not to exceed 9.0E+05 kg. See Addendum 1 for additional information. | | OR Enri | MAX ENRICHMENT WGT % ichment not expected to eed 10%. | 10c. MAX ISOTOPE WGT (KG) Not to exceed 350 grams SNM. |
| 11. FOREIGN OBLIGATIONS (BY COUN Germany | TRY AND BY PERCE | ENTAGE OF M | ΑΧΙΜυΜ ΤΟ | OTAL VOLUME) | | NOV | Rec'l 032010 |

| | | | \smile | Page 2 of 3 | | |
|--|--------------------------|--|---|---------------------------------|--|--|
| NRC FORM 7 | | | U.S. NUCLEAR | R REGULATORY COMMISSION | | |
| (3-2010) 10 CFR 110 | | | | | | |
| APPLICATION FOR NRC EXPORT/IMPORT | | | | | | |
| LICENSE, AMENDMENT, OR RENEWAL (Continued) | | | | | | |
| LICENSE NUMBER 9 DOCKET NUME | 246 | CCESSION NUMBER | and the state of the | NON-PUBLIC | | |
| PART D. TO BE COMPLETED F (If more space is needed to com | OR IMPORT ONLY, O | R COMBINED LICENSES, Pages 3-4 first, and then attack | additional sheets, il neu | coodiy.) | | |
| 12. NAME(S) / ADDRESS(ES) OF FOREIGN | 13. NAME(S) / ADDRES | S(ES) OF INTERMEDIATE | 14. NAME(S) / ADDRE CONSIGNEE(S) | SS(ES) OF ULTIMATE | | |
| SUPPLIERS AND/OR OTHER PARTIES | CONSIGNEE(S) | | | DSO . | | |
| Wilhelm Wartenberg | | | Philip Gianutsos EnergySolutions | | | |
| Eckert & Ziegler | N/A | | 1560 Bear Cree | | | |
| Nuclitec GmbH | 14// 1 | | Oak Ridge, TN | A 10 10 10 100 | | |
| Gieselweg 1 38110 Braunschweig | | | 865 220-1478 | | | |
| Germany | | | | | | |
| Tel.: +49 5307 932 142 | | | | | | |
| Fax: +49 5307 932 341 | | | | | | |
| | | | | | | |
| 12a. NRC EXPORT LICENSE NUMBER(S) | 13a. LICENSE NUMBER(| S) / EXPIRATION DATE(S) | 14a. LICENSE NUMBER | R(S) / EXPIRATION DATE(S) | | |
| (if applicable) | N/A | | a second second of the second s | g radioactive waste at site | | |
| Application for export license for the return of ash applied for with this application | | | Brauschweig: 4/06 Han (dated 03. | March 2006) | | |
| | | | | e 11/04 (dated 05. July | | |
| | | | 2004) | | | |
| | | | No expiry date Issued by Gewerber | aufsichtsamt | | |
| | | | Braunschweig, Gen | | | |
| | | | License for interme | diata staraga of | | |
| | | | radioactive waste at | | | |
| | | | R Gard 2018 | 007 (dated 29 Dec 2008) | | |
| | | | No expiry date | aufsichtsamt Leese, | | |
| | | | Germany | | | |
| | 13b. INTERMEDIATE US | E(S) | 14b. INTERMEDIATE U | JSE(S) | | |
| | N/A | - | N/A | | | |
| | | | | | | |
| | | | | | | |
| 15. DESCRIPTION OF RADIOACTIVE MATERIALS | S, SEALED SOURCES, | 15a. MAX TOTAL VOLUME/ ELEMENT WGT (KG), OR | 15b. MAX ENRICHMEN OR WGT % | NT 15c. MAX ISOTOPE WGT (KG) | | |
| | litional information | TOTAL ACTIVITY (TBq) | Enrichment not expected | d to Not to exceed 350 | | |
| Dry active material for incineration. See Addendum 2 for add | itional information | Not to exceed 9.0E+05 kg. | exceed 10%. | grams SNM. | | |
| | | See Addendum 1 for additional information. | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 16. FOREIGN OBLIGATIONS (BY COUNTRY AND | BY PERCENTAGE OF M | AXIMUM TOTAL VOLUME) | | | | |
| PART E. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, OR RENEWALS | | | | | | |
| 17. ADDITIONAL | | E.SERGEO, PARENDINEN | | | | |
| INFORMATION PROVIDED ON PAGES 3, 4, X YES | | OF RECIPIENTS' | 🗆 YES 🖾 NO | | | |
| AND/OR ON SEPARATE | AUTHORIZA | TIONS PROVIDED? | | | | |
| SHEETS? | uthorized official hereb | v certify that this application | is prepared in confor | mity with Title 10 | | |
| 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 | | | | | | |
| Ind gran pur | | | | | | |

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|---|---------------------------------|--|------------------------------------|--|--|
| NRC FORM 7 (3-2010) | | | U.S. NUCLEAR REGULATORY COMMISSION | | |
| APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL (Continued) | | | | | |
| LICENSE NUMBER | DOCKET NUMBER | ADAMS ACCESSION NUMBER | | | |
| ADDITIONAL INFORMATION (Referen | ce applicable block numbers fro | m 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

IN 029

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:

| <u>Radionuclides</u> | <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 |
| | |

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 A₂ 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,

IW 029

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.

IWD29 Rec'd

NOV 03 2010



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

XW 018 IW 029 Rec'd

NOV 0 3 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,

Zs

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





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

XW018 ZW029

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