


<b>NRC FORM 7</b> (02-2016) 10 CFR 110		<b>U. S. NUCLEAR REGULATORY COMMISSION</b>	<b>APPROVED BY OMB: NO. 3150-0027</b> <b>EXPIRES: 11/30/2018</b> 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 FOIA, Privacy, and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollections.Resource@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.						
<b>APPLICATION FOR NRC EXPORT OR IMPORT          LICENSE, AMENDMENT, RENEWAL,          OR CONSENT REQUEST(S)</b> <i>(See Instructions on Pages 4 and 5)</i>									
<b>PART A. FOR NRC USE ONLY</b>		<input checked="" type="checkbox"/> <b>PUBLIC</b> <b>OR</b> <input type="checkbox"/> <b>NON-PUBLIC</b>							
<b>LICENSE NUMBER</b> PXB216.01		<b>DOCKET NUMBER</b> 11D06285	<b>DATE RECEIVED</b> 1/22/19 <b>ADAMS ACCESSION NUMBER</b>						
<b>PART B. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, RENEWALS, OR CONSENT REQUESTS</b> (If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)									
<b>1. NAME AND ADDRESS OF APPLICANT/LICENSEE</b>  Halliburton Energy Services 3000 N. Sam Houston Pkwy E. Houston, TX 77032		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <b>1a. NAME OF APPLICANT'S CONTACT</b>            Kateri Flynn         </td> <td style="width: 50%; vertical-align: top;"> <b>1b. APPLICANT'S REFERENCE NUMBER</b>            HES3287         </td> </tr> <tr> <td style="vertical-align: top;"> <b>1c. PHONE NUMBER</b>            (713) 839-4929         </td> <td style="vertical-align: top;"> <b>1d. FAX NUMBER</b>            (713) 839-3290         </td> </tr> <tr> <td colspan="2" style="vertical-align: top;"> <b>1e. E-MAIL ADDRESS</b>            kateri.flynn@halliburton.com         </td> </tr> </table>		<b>1a. NAME OF APPLICANT'S CONTACT</b> Kateri Flynn	<b>1b. APPLICANT'S REFERENCE NUMBER</b> HES3287	<b>1c. PHONE NUMBER</b> (713) 839-4929	<b>1d. FAX NUMBER</b> (713) 839-3290	<b>1e. E-MAIL ADDRESS</b> kateri.flynn@halliburton.com	
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<b>1e. E-MAIL ADDRESS</b> kateri.flynn@halliburton.com									
<b>2. TYPE OF ACTION REQUESTED (Check One)</b> <table style="width: 100%;"> <tr> <td style="text-align: center;"><input type="checkbox"/> <b>EXPORT</b> (Parts B, C, E)</td> <td style="text-align: center;"><input type="checkbox"/> <b>IMPORT</b> (Parts B, D, E)</td> <td style="text-align: center;"><input checked="" type="checkbox"/> <b>AMENDMENT/RENEWAL</b> Current License Number: PXB216.00</td> <td style="text-align: center;"><input type="checkbox"/> <b>CONSENT REQUEST</b> (Parts B, C) Current License Number:</td> </tr> </table>				<input type="checkbox"/> <b>EXPORT</b> (Parts B, C, E)	<input type="checkbox"/> <b>IMPORT</b> (Parts B, D, E)	<input checked="" type="checkbox"/> <b>AMENDMENT/RENEWAL</b> Current License Number: PXB216.00	<input type="checkbox"/> <b>CONSENT REQUEST</b> (Parts B, C) Current License Number:		
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<b>3. CONTRACT NUMBER(S)</b>	<b>4. FIRST SHIPMENT DATE</b>	<b>5. LAST SHIPMENT DATE</b>	<b>6. PROPOSED EXPIRATION DATE</b>						
<b>PART C. TO BE COMPLETED FOR EXPORT LICENSES, AMENDMENTS, OR RENEWALS</b> (If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)									
<b>7. NAME(S) / ADDRESS(ES) OF SUPPLIERS AND/OR OTHER PARTIES TO THE EXPORT</b>  Halliburton Energy Services Inc. 3000 N. Sam Houston Parkway E. Houston, TX 77032  Halliburton Energy Services, Inc. 14851 Milner Road Gate 5 A-Dock SR-1/SR-2 Houston, TX 77032		<b>8. NAME(S) / ADDRESS(ES) OF INTERMEDIATE FOREIGN CONSIGNEE(S)</b>							
<b>7a. FUNCTION(S) PERFORMED/SERVICE(S) PROVIDED</b>		<b>8a. INTERMEDIATE USE(S)</b>							
<b>10. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES, EQUIPMENT, OR COMPONENTS; FOR NUCLEAR EQUIPMENT INCLUDE TOTAL DOLLAR VALUE OF EQUIPMENT FOR EXPORT</b>  Category 2: Americium-241, Americium-241/Beryllium, Cobalt 60, Californium-252, Cesium-137		<b>10a. MAX TOTAL VOLUME / ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq)</b>  N/A	<b>10b. MAX ENRICHMENT OR WGT %</b>  N/A						
<b>11. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME)</b>		<b>10c. MAX ISOTOPE WGT (KG)</b>  N/A							

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U. S. NUCLEAR REGULATORY COMMISSION

**APPLICATION FOR NRC EXPORT OR IMPORT  
LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)**

LICENSE NUMBER PXB 216.01	DOCKET NUMBER 11D06285	ADAMS ACCESSION NUMBER	<input checked="checked" type="checkbox"/> PUBLIC OR <input type="checkbox"/> NON-PUBLIC
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ADDITIONAL INFORMATION (Reference applicable block numbers from page 1 and/or page 2 for each entry)

The purpose of this application is to renew license PXB216.00 which expires on 1/31/19.

Tier 3 Countries of Ultimate Destination:

Antigua and Barbuda, Barbados, Belize, Benin, Bhutan, Bosnia and Herzegovina, Botswana, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Congo (Kinshasa), Dominica, East Timor, Eritrea, Fiji, Gambia, Georgia, Grenada, Guinea, Guinea-Bissau, Kenya, Kiribati, Kosovo, Kyrgyzstan, Laos, Lebanon, Lesotho, Liberia, Liechtenstein, Macedonia, Malawi, Maldives, Mali, Malta, Marshall Islands, Mauritius, Micronesia, Moldova, Monaco, Mongolia, Nauru, Nepal, Nicaragua, Oman, Palau, Rwanda, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Samoa, San Marino, Sao Tome and Principe, Senegal, Serbia, Seychelles, Sierra Leone, Solomon Islands, Somalia, Sri Lanka, Swaziland, Tajikistan, Tanzania, Togo, Tonga, Tuvalu, Uganda, Uzbekistan, Vanuatu, Zambia, and Zimbabwe.

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U. S. NUCLEAR REGULATORY COMMISSION

**APPLICATION FOR NRC EXPORT OR IMPORT  
LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)**

LICENSE NUMBER <b>PKB216.01</b>	DOCKET NUMBER <b>11006285</b>	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 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 Multiple Halliburton Energy Services, Inc. and its subsidiary locations onshore and offshore around the world.	13. NAME(S) / ADDRESS(ES) OF INTERMEDIATE CONSIGNEE(S)	14. NAME(S) / ADDRESS(ES) OF ULTIMATE U. S. CONSIGNEE(S)	
12a. NRC EXPORT LICENSE NUMBER(S) (if applicable)	13a. LICENSE NUMBER(S) / EXPIRATION DATE(S)	14a. LICENSE NUMBER(S) / EXPIRATION DATE(S)	
	13b. INTERMEDIATE USE(S)	14b. ULTIMATE END USE(S)	
15. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES Category 2: Americium-241, Americium-241/Beryllium, Cobalt 60, Californium-252, Cesium-137	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, RENEWALS OR CONSENT REQUEST(S)**

17. ADDITIONAL INFORMATION PROVIDED ON PAGES 3, 4, 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
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 Kateri Flynn International Trade Compliance Analyst	18b. SIGNATURE -- AUTHORIZED OFFICIAL  kateri.flynn@halliburton.com <small>Digitally signed by kateri.flynn@halliburton.com DN: cn=kateri.flynn@halliburton.com Date: 2019.01.10 07:06:14 -06'00'</small>
18c. DATE	

# HALLIBURTON

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3000 N. Sam Houston Parkway E. Houston, TX 77032-3219  
Tel: 713-839-4929 • E-mail: Kateri.flynn@halliburton.com

Deputy Director,  
Office of International Programs  
U.S. Nuclear Regulatory Commission  
Mail Stop O-4E21  
11555 Rockville Pike  
Rockville, Maryland 20852

January 10, 2019

**RE: Application for License for the Export and Import of Category 2: Americium-241, Americium-241/Beryllium, Cobalt 60, Californium-252, and Cesium-137**

**HES3287**

Deputy Director,

Halliburton Energy Services, Inc. (HESI) is applying for a license to export and import Category 2: **Category 2: Americium-241, Americium-241/Beryllium, Cobalt 60, Californium-252, and Cesium-137** sources for shipments to the country grouping (see country group on the attached form 7). Only HESI and its subsidiaries will use these materials in their well logging operations. The materials requested are used in well logging tools, such as density porosity logging tools, neutron porosity logging tools, and elemental analysis logging tools, which are used to provide logging and perforating services to our clients in countries where we currently conduct business in and others where we may have future business. (Please see Form 7 for all consignee information). These items are subject to the export-licensing jurisdiction of the U. S. Nuclear Regulatory Commission.

Sealed sources will remain in the custody of by HESI at all times, and when not in use, will be stored in a secure facility controlled by HESI and its subsidiaries.

HESI in consideration of Title 10, Part 110.42 (c) of the Code of Federal Regulations, submits that the NRC-Controlled Items proposed for export are not inimical to the common defense and security of the United States and the proposed exports are consistent with the policies and objectives of the United States Government.

We would like to request the expedited review of this license submission as not to cause any delays in shipments to any of the countries on this license. The current license will expire on January 31, 2019.

If you should have any questions please do not hesitate to contact me.

Sincerely,

Kateri Flynn  
Halliburton Law Department  
International Trade Compliance Analyst  
Phone: 713-839-4929  
Fax: 281-871-6450  
Kateri.flynn@halliburton.com

# HALLIBURTON

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3000 N. Sam Houston Parkway E. Houston, TX 77032-3219  
Tel: 713-839-4929 • E-mail: Kateri.flynn@halliburton.com

## **License Application and Request:**

The purpose of this license application is to request an RA Source license to export to countries listed on the Form 7. This application is for RA sources exporting to a group of countries we currently conduct business in and others we may have future business in.

This application criteria is based on business requirements to fulfill by Halliburton Energy Services, Inc. (HES), and its subsidiaries in the oil and gas field service work both onshore and offshore throughout the world for shipments that exceed NRC threshold limits per 10 CFR Part 110.

The regulation requires the use of the 'sum of calculations' methodology for multiple or consolidated shipments. Halliburton has several RA sources that are less than the threshold but could exceed the limits if consolidated.

## **Scope of Work:**

Halliburton Energy Services, Inc. (HESI) is one of the world's largest providers of products and services to the oil and gas industries. HES offers a broad array of products and services to upstream oil and gas customers worldwide. The Drilling and Formation Evaluation segment is primarily involved in drilling and evaluating the formations related to borehole construction and initial oil and gas formation evaluations and RA sources are a necessary element to the evaluation. RA sources will be used to provide logging and perforating services to our clients worldwide.

## **Halliburton's Corporate Radiation Safety Program:**

HESI ensures compliance with radioactive source regulations by company policy and through the training, execution, and monitoring of our Corporate Radiation Safety Program (CRSP). The purpose of the CRSP program is to define and implement processes that minimize radiation exposure of personnel, property, and the environment resulting from working with radioactive materials and sources used by the company. Key areas covered by the program include:

- Organization and Authority Descriptions
- Radiation Safety Procedures Development and Maintenance
- Radiation Safety Training
- Radiation Exposure Control
- Procedures for Receipt, Handling, Identification, and Disposal of Radioactive Materials
- Radiological Emergencies and Incidents
- Radiation Protection Equipment Calibration and Maintenance
- Recordkeeping

It is the policy of HESI that the CRSP be executed both nationally and internationally. HESI facilities located in countries with less restrictive regulations shall comply with this program as the minimum acceptable standard of radiation safety. A copy of these guidelines can be provided as required.

## **End User Authorization to Receive and Possess the Material:**

HESI, its entities, and subsidiaries will be the end users of these materials in the following countries where HESI operates.

Licensed materials will be stored at approved by HESI facilities only. All current facilities are licensed for use and storage as required by local and international law. All future facilities will also be licensed for use and storage as required by local and international law before import or exports or source are allowed.

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The licensed materials shall be used by, or under the supervision and in the physical presence of the HESI Radiation Safety Officer, or individuals who have been trained as specified in HESI materials license of individuals designated as users.

Random compliance audits check the effectiveness of each facility's radiation safety program maintenance while providing oversight by the Global Radiation Safety Group. The audit covers all major aspects of all the radioactive material usage. This audit is conducted by a Global Radiation Safety Officer (GRSO), and Associated Radiation Safety Officer (ARSO), a Region Radiation Safety Manager, or a qualified individual designated by a GRS).

## **Concern for Diversion:**

The RA sources authorized for export under this license will only be used by trained employees of HESI and trained employees of its subsidiaries.

Halliburton's Corporate Radiation Safety Program provides auditable processes for storage, usage, transportation, monitoring, and recordkeeping for all radioactive sources as well as training and internal management review to ensure the safety of the people and the environment.

All movements of radioactive sources are pre-screened and approvals are required prior to shipment by the Radiation Safety Group and the International Trade Compliance Department.

The RA sources authorized for export or import will not be used for any nuclear activities or by any nuclear end users.

The commodities will not be resold without prior approval and notification as required by the NRC and local regulations.

HESI and its subsidiaries have consistently maintained, monitored, and reported to the Nuclear Regulatory Commission on all licenses related to the control of radioactive materials.