NRC FORM 250P (12/05)



## United States of America

Nuclear Regulatory Commission Washington, D.C. 20555 NRC LICENSE NO.: CBP63-1

LICENSE EXPIRES: April 30, 2009

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Pursuant to the Atomic Energy Act of 1954, as amended, and the regulations issued by the Nuclear Regulatory Commission (NRC) pursuant thereto, and in reliance on statements and representations heretofore made by the applicant/licensee, this license is hereby issued authorizing the licensee to import and/or export the byproduct materials listed below, subject to the terms and conditions herein. This license is only valid if the licensee maintains the requisite NRC or Agreement State domestic licenses.

#### LICENSEE

Precision Energy Services, Inc. A Weatherford Company ATTN: Jeffrey Pettigrew 515 Post Oak Boulevard, Suite 600 Houston, Texas 77027-9408

APPLICANT'S REFERENCE NUMBER: India DS LWD 2006

INTERMEDIATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES) AND/OR IN THE U.S.

NONE

#### **ULTIMATE FOREIGN CONSIGNEE(S)**

Precision Energy Services, Inc. Weatherford Oil Tool M.E. LTD. India Drilling Services 921, Bldg. No. 9, 2nd Floor Solitaire Corporate Park 167, Guru Hargovindji Marg Chakala, Andheri (East) Mumbai - 400093 India

OTHER PARTY(IES) TO IMPORT/EXPORT

Listed on Page 3.

COUNTRY(IES) OF ULTIMATE DESTINATION: India and United States.

DESCRIPTION OF 10 CFR PART 110, APPENDIX P, BYPRODUCT MATERIALS TO BE IMPORTED AND/OR EXPORTED

(NOTE: SEE PAGE 2 FOR DEFINITIONS OF CATEGORY 1 AND CATEGORY 2)

Import and export, from and to India, Category 2 quantities of Americium-241 and Cesium-137, contained in sealed sources for use in oil and gas well logging operations.

Sealed sources will remain in the custody of either Precision Energy Services, Inc. employees or Weatherford Oil Tool M.E. LTD. at all times, and, when not in use, will be stored in a secure facility controlled either by Precision Energy Services, Inc or Weatherford Oil Tool M.E. LTD.

Licensee is responsible for compliance with all applicable import, export, and other domestic regulatory requirements, including all terms and conditions of domestic materials license(s).

This license replaces CBP0063 and amends its authority to extend the expiration date from April 30, 2007 to April 30, 2009, and add additional import and/or export locations. License expiration date is based on April 30, 2009 expiration date of the State of Texas, Department of State Health Services, Radioactive Material License L00747.

Neither this license or any right under this license shall be assigned or otherwise transferred in violation of the provisions of the Atomic Energy Act of 1954, as amended.

This license is subject to the right of recapture or control by Section 108 of the Atomic Energy Act of 1954, as amended, and to all of the other provisions of said Act, now or hereafter in effect and to all valid rules and regulations of NRC.

THIS LICENSE IS INVALID UNLESS SIGNED BELOW
BY AUTHORIZED NRC REPRESENTATIVE

NAME AND TITLE: Stephen Dembek

Acting Deputy Director
Office of International Programs

DATE OF ISSUANCE July 18, 2007

**IMPORT AND EXPORT LICENSE** 

Table 1: Appendix P to Part 110-Category 1 and Category 2 Radioactive Material Threshold Limits

Radioactive Material	Category 1		Category 2	
	Terabequerels (TBq)	Curies (Ci)¹	Terabequereis (TBq)	Curies (Ci)1
Americium-241/Be	60	1,600	0.6	16
Californium-252	20	540	0.2.	5.4
Curium-244	50	1,400	0.5	14
Cobalt-60	30	810	0.3	8.1
Cesium-137	100	2,700	1.0	27
Gadolinium-153	1,000	27,000	10.0	270
Iridium-192	80	2,200	0.8	22
Plutonium-238²	60	1,600	0.6	7 - 16
Plutonium-239/Be2	60	1,600	0.6	16
Promethium-147	40,000	1,100,000	400	11,000
Selenium-75	200	5,400	2.0	54
Strontlum-90 (Y-90)	1,000	27,000	10.0	270
Thulium-170	20,000	540,000	200	5,400
Ytterbium-169	300	8,100	3.0	

### Calculation of Shipments Containing Multiple Sources or Radionuclides

The "sum of fractions" methodology for evaluating combinations of radionuclides being transported, is to be used when import or export shipments contain multiple sources or multiple radionuclides. The threshold limit values used in a sum of the fractions calculation must be the metric values (i.e., TBq).

1. If multiple sources and/or multiple radionuclides are present in an import or export shipment, the sum of the fractions of the activity of each radionuclides must be determined to verify the shipment is less than the Category 1 or 2 limits of Table 1, as appropriate. If the calculated sum of the fractions ratio, using the following equation, is greater than or equal to 1.0, then the import or export shipment exceeds the threshold limits of Table 1 and the applicable security provisions of this part apply.

II. Use the equation below to calculate the sum of the fractions ratio by inserting the actual activity of the applicable radionuclides or of the individual sources (of the same radionuclides) in the numerator of the equation and the corresponding threshold activity limit from the Table 1 in the denominator of the equation. Ensure the numerator and denominator values are in the same units and all calculations must be performed using the TBq (i.e., metric) values of Table 1.

R1 = activity for radionuclides or source number 1

R2 = activity for radionuclides or source number 2

RN = activity for radionuclides or source number n

AR1 = activity limit for radionuclides or source number 1

AR2 = activity limit for radionuclides or source number 2

ARN = activity limit for radionuclides or source number n

$$\sum_{i=1}^{n} \left[ \frac{R_1}{AR_1} + \frac{R_2}{AR_2} + \frac{R_n}{AR_n} \right] \ge 1$$

NOTIFICATIONS: The notifications required by 10 CFR 110.50(b)(4) are to be emailed to hoo1@nrc.gov (preferred method) or faxed to 301-816-5151. In the subject line of the email or on the fax cover page include: "10 CFR 110.50(b)(4) Notification." To contact someone in the Operations Center, use the same e-mail address or call 301-816-5100. The contact information is current at the time of license issuance. Difficulties notifying the U.S. Nuclear Regulatory Commission must be promptly reported to the Office of International Programs' Import/Export licensing staff.

<sup>&</sup>lt;sup>1</sup> The values to be used to determine whether a license is required are given in TBq. Curie (Ci) values are provided for practical usefulness only and are rounded after conversion.

<sup>&</sup>lt;sup>2</sup> The limits for Pu-238 and Pu-239/Be in this table apply for imports to the U.S. The limits for exports of Pu-238 and Pu-239/Be can be found in § 110.21.

# OTHER PARTY(IES) TO IMPORT AND/OR EXPORT

- NSSI/Sources & Services, Inc. 5711 Etheridge Street Houston, Texas 77087-4009
- Precision Energy Services, Inc. A Weatherford Company 500 Winscott Road Fort Worth, Texas 76126
- Precision Energy Services, Inc. A Weatherford Company 16210 West Hardy Road Houston, Texas 77060-1664