

EXPORT LICENSE

NRC FORM 250P
(12/10)

United States of America
Nuclear Regulatory Commission
Washington, D.C. 20555

NRC LICENSE NO.: **PXB4b.05**

LICENSE EXPIRES: January 31, 2015

Page 1 of 6

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 export the byproduct materials listed below, subject to the terms and conditions herein. This license is only valid if the licensee or 'Other Party(ies) to Export' maintain the requisite NRC or Agreement State domestic license(s).

LICENSEE

Baker Hughes Oilfield Operations, Inc.
Attn: James Elrod
2001 Rankin Road
Houston, Texas 77073

APPLICANT'S REFERENCE: RENEWPCB4b.04

ULTIMATE FOREIGN CONSIGNEE(S)

Listed on Pages 3-6

INTERMEDIATE CONSIGNEE(S) IN FOREIGN
COUNTRY(IES)

NONE

OTHER PARTY(IES) TO EXPORT

NONE

COUNTRY(IES) OF ULTIMATE DESTINATION: Albania, Algeria, Angola, Azerbaijan, Bahrain, Brunei, Colombia, Congo (Brazzaville), Ecuador, Egypt, Equatorial Guinea, Gabon, Ghana, India, Indonesia, Kuwait, Malaysia, Mauritania, Mexico, Namibia, Nigeria, Oman, Pakistan, Peru, Qatar, Saudi Arabia, South Africa, Trinidad and Tobago, Tunisia, Turkmenistan, United Arab Emirates, and Venezuela.

**CONDITIONS, NOTES, AND DESCRIPTIONS OF 10 CFR PART 110, APPENDIX P,
BYPRODUCT AND SOURCE MATERIALS TO BE EXPORTED**

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

Export to countries listed on 'Country (ies) of Ultimate Destination' of Category 2 quantities of Am-241/Be, contained in sealed sources for use in oil and gas well logging operations is authorized.

Sealed sources will remain in the custody of either Baker Hughes Oilfield Operations, Inc. or its foreign affiliate(s) at all times and when not in use, will be stored in a secure facility controlled either by Baker Hughes Oilfield Operations, Inc. or its foreign affiliate(s). Licensee is responsible for ensuring that all end users of Am-241/Be sources have obtained and hold valid and appropriate material possession licenses prior to receipt of any sealed sources containing radioactive material.

Licensee is responsible for compliance with all applicable export, and other domestic regulatory requirements, including all terms and conditions of domestic materials license(s). Licensee, if not already submitted with your application, must submit information required by 10 CFR §110.32(d) and pertinent documentation required by 10 CFR §110.32(g) at least **24 hours prior to shipment**. See Page 2 for Mandatory Pre-shipment Notifications. Licensee shall submit by February 1 of each year one copy of a report of all americium shipments during the previous calendar year. The report must include: (1) A description of the material, including quantity; (2) Approximate shipment dates; and (3) A list of recipient countries, end users, and intended use keyed to the items shipped.

License expiration is based upon established limits. This license replaces PCB4b.04 and amends its authority by: 1) extending the expiration date from January 31, 2012 to January 31, 2015; 2) numbering the list of Ultimate Foreign Consignee(s); and 3) issuing as an export only license.

Neither this license nor 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 Acts, now or hereafter in effect and to all valid rules and regulations of the NRC.

THIS LICENSE IS INVALID UNLESS SIGNED BELOW
BY AUTHORIZED NRC REPRESENTATIVE

NAME AND TITLE:

Scott W. Moore
Scott W. Moore, Deputy Director
Office of International Programs

DATE OF ISSUANCE: January 27, 2012

EXPORT LICENSE

MANDATORY PRE-SHIPMENT NOTIFICATIONS PER 10 CFR PART 110.50(c)

The following Prior Shipment Notifications must be made to both the NRC and, in case of exports, the government of the importing country in advance of each shipment:

Prior Shipment Notifications to the NRC are to be emailed to hoo.hoc@nrc.gov (preferred method) or faxed to the NRC at 301-816-5151. In the subject line of the email or on the fax cover page include: "10 CFR 110.50(c) Notification." For technical assistance, use the same e-mail address or call 301-816-5100.

Prior Shipment Notifications to the government of the importing country must be emailed or faxed to the appropriate foreign government authorities. To locate the point-of-contact for international Prior Shipment Notifications see: <http://www-ns.iaea.org/downloads/rw/imp-export/import-export-contact-points.pdf>. In the subject line of the email or on the fax cover page include: "NOTIFICATION TO THE IMPORTING STATE PRIOR TO SHIPMENT OF CATEGORY 1 OR 2 RADIOACTIVE SOURCES." For technical assistance or for countries not listed, contact the Office of International Programs' export/import staff at 301-415-2344.

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	Terabequerels (TBq)	Curies(Ci) ¹
Americium-241 (Am-241)	60	1,600	0.6	16
Americium-241/Beryllium (Am-241/Be)	60	1,600	0.6	16
Californium-252 (Cf-252)	20	540	0.2	5.4
Curium-244 (Cm-244)	50	1,400	0.5	14
Cobalt-60 (Co-60)	30	810	0.3	8.1
Cesium-137 (Cs-137)	100	2,700	1.0	27
Gadolinium-153 (Gd-153)	1,000	27,000	10.0	270
Iridium-192 (Ir-192)	80	2,200	0.8	22
Plutonium-238 ² (Pu-238)	60	1,600	0.6	16
Plutonium-239/Beryllium ² (Pu-239/Be)	60	1,600	0.6	16
Promethium-147 (Pm-147)	40,000	1,100,000	400	11,000
Radium-226 ³ (Ra-226)	40	1,100	0.4	11
Selenium-75 (Se-75)	200	5,400	2.0	54
Strontium-90 (Y-90)	1,000	27,000	10.0	270
Thulium-170 (Tm-170)	20,000	540,000	200	5,400
Ytterbium-169 (Yb-169)	300	8,100	3.0	81

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).

I. 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

$$\sum_{i=1}^n \left[\frac{R_i}{AR_i} + \frac{R_2}{AR_2} + \frac{R_n}{AR_n} \right] \geq 1$$

¹ 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.

² The limits for exports of Pu-238 and Pu-239/Be can be found in § 110.21.

³ Discrete sources of Radium-226.

ULTIMATE FOREIGN CONSIGNEE(S) CONT'D

1. Western Atlas International, SH.P.K
Afrim I Ri
P.O. Box 606, Albaposta Fier
Fier
Albania
2. Western Atlas International, Inc.
BP 493 Hassi Messoud
30500 Ouargla
Ouargla
Algeria
3. Atlas Wireline Limited
Baker Hughes EHO Ltd. Angola
Baker Atlas Sonils Oilfield SVC CTR
Luanda
Angola
4. Baker Hughes Services International, Inc.
Western Atlas International, Inc.
340 Nizami St, BS CTR 6th Floor ISR
Baku
Azerbaijan
5. Baker Hughes EHO Ltd.
Western Atlas International, Inc.
Bahrain Towers, Al Khalifa Road
Building 20, Office 152
Manama
Bahrain
6. Baker Hughes EHO Ltd
Baker Atlas
F22 Jalan Utara
New Industrial Area, Seria
P.O. Box 686, Seria KB1133
Brunei
7. Baker Hughes de Colombia
Calle 100 No. 8 A-55
Torre C Oficina 202
Bogota
Colombia
8. Baker Hughes Asia Pacific Ltd., Congo Branch
BP 1171
353, Boulevard de Loango
Pointe-Noire
Congo (Brazzaville)
9. Baker Hughes Inteq Congo S.A.R.L.
c/o Baker Atlas
Pointe Noire
BP 357 Kouilou
Congo (Brazzaville)
10. Baker Hughes International Branches, Inc.
Division Atlas
Avenida Naciones Unidas 1014 y Amazonas
Edificio Banco La Previsora
Torre A, 5 to Piso, Of. 501
Quito
Ecuador
11. Baker Hughes International Branches, Inc.
Division Atlas
Via Lago Agrio, Diagonal al Aeropuerto
Puerto Francisco de Orellana (El Coca), Napo
Ecuador
12. Western Atlas International
Baker Hughes Building No. 14, Road 280
New Maadi
Cairo
Egypt
13. Baker Hughes Inteq-France SA
Cocoteros Calle Abilio Balboa 4
Malabo Bioko Norte
Equatorial Guinea
14. Baker Hughes Gabon S.A.
BP 587
Zone Industrielle Oprag
Port Gentil
Gabon
15. Baker Hughes (Ghana) Ltd.
Plot No. 1 Cape Coast Rd.
Commercial Area North
Takoradi
Ghana
16. Baker Atlas
Plot K-10 MIDC
Thane – Belapur Road, Airoli
Navi Mumbai 400708
India

ULTIMATE FOREIGN CONSIGNEE(S) CONT'D

17. Baker Atlas
Yard No 16/2 ADB Rd
Opp Hamsavahini Public School
Vakalapudi Village, Kakinada, Andhra
Pradesh – 533005
India
18. Baker Atlas
Building No. 14
Karukalacherry Road, Karaikal
Puducherry State, 609602
India
19. Baker Hughes Singapore Pte -
India Project Office
c/o Reliance Industries Limited
MMTC Warehouse
Next to Port Administration Building
Kakinada A.P. State
India
20. Baker Hughes Singapore Pte –
India Project Office
c/o Reliance Industries Limited
Offshore Rig “Actinia”
Block #KG-OSN-97/2, KG-OST-97/3
KG-OSN-2001/1, KG-OSN-2001/2
Bay of Bengal
India
21. Baker Hughes Singapore Pte –
India Project Office
c/o Cairn Energy India
N-H-1 Drill Site (Village & Kharsa-
Praganiyon Ki Dhani and Hariyali)
Bhadka
Tehsil-Barmer, District-Barmer
Rajasthan
India
22. Baker Hughes Singapore Pte
Next to Light House
Tammavaram Post, ADB Road
Vakalapudi, Kakinada 533-005
India
23. PT Baker Atlas Indonesia
Building 404W Cilandak Comm. Estate
J1 Cilandak KKO
Jakarta
Indonesia
24. PT Baker Atlas Indonesia
JL. Jendral Sudirman No. 46
Prabumulih
Sumatra Selatan
Indonesia
25. PT Baker Atlas Indonesia
Division of Baker Atlas
JL Mulawarman KM 16, RT 15/RW03, 63
Balikpapan, Kalimantan Timur
Indonesia
26. Western Atlas International, Inc.
Exim Trading Company Ltd.
25731
Safat
Kuwait
27. Baker Atlas (M) SDN BHD
Lot No. 8, Jalan Arsat Light
Industrial Estate
Labuan Federal Territory
Malaysia
28. Baker Atlas (M) SDN BHD
3 Door 4/5 Kemaman Supply Base
Kemaman
Terrengganu
Malaysia
29. Baker Atlas (M) SDN BHD
Lot 31, Block 3, 2nd Floor
Piasau Industrial Estate
Miri, Sarawak
Malaysia
30. Baker Atlas (M) SDN BHD Miri
Division of Baker Atlas, 8 Jalan Arsat
Light Ind. Estate
Miri
Malaysia

ULTIMATE FOREIGN CONSIGNEE(S) CONT'D

31. Baker Hughes EHO Ltd.
Baker Atlas Division
17 RUE 24-121 Ksar
BP 4925 Nouakchott
Mauritania
32. Baker Hughes de Mexico S. de R.L. de C.V.
Km. 9+200 Carretera Federal Carmen -
Puerto Real por Av. Edzna
Fraccionamiento Mundo Maya
Ciudad del Carmen, Campeche C.P. 24190
Mexico
33. Baker Hughes EHO Ltd.
c/o Manica Group Namibia Logistics
Shell Explo & Pro Nam Bv, 55 Haven
Luderitz
Namibia
34. Baker Hughes Company Limited
Plot 125 Trans Amadi Industrial
Port Harcourt River Estate
Port Harcourt
Nigeria
35. Western Atlas International, Inc.(Baker Atlas)
2nd Floor, Al Raid House
Qurum
Oman
36. Western Atlas International, Muscat Branch
Baker Atlas
2nd Floor, Al Raid House
Mina al Fahal – PC – 116
Muscat
Oman
37. Baker Hughes EHO Ltd.
Plot 193 Street 1 Sector 1-10/3
Islamabad
Pakistan
38. Baker Hughes International Operation
Del Peru S.A.
Republica de Panama 3055
Piso 10
San Isidro, Lima 27
Lima
Peru
39. Baker Hughes EHO Ltd.
Baker Atlas
2nd Floor, ABB (Toyota) Tower
Doha
Qatar
40. Western Atlas Arabia Ltd.
Division of Western Atlas International, Inc.
Dhahran Airport, Box 721
Dhahran
Saudi Arabia
41. Western Atlas Arabia Ltd.
Division of Western Atlas International, Inc.
P.O. Box 31721
Al Khobar 31952
Al Khobar
Saudi Arabia
42. Baker Hughes South Africa (Pty) Ltd.
Block B, Silverwood
Steenberg Office Park
Steenberg, Cape Town
South Africa
43. Baker Hughes (Trinidad) Limited
Baker Atlas Trinidad
Maple House 3rd Floor, 3 & 3A Sweet Br
Port of Spain
Trinidad and Tobago
44. Western Atlas International, Inc.
Division of Western Atlas
2045 Les Bergesdu Lac
Tunis
Tunisia
45. Western Atlas International, Inc.
Turkmenistan SPPY Camp, 8
Shagadam St, c/o Turkeman Sea Co
Turkmenistan
Turkmenistan
46. Western Atlas International, Inc.
Building 112, ATA Goushutova
Ashkabad
Turkmenistan

ULTIMATE FOREIGN CONSIGNEE(S) CONT'D

- | | |
|---|--|
| 47. Western Atlas International, Inc.
8786 Mussafah
Abu Dhabi
United Arab Emirates | 50. Baker Hughes S.R.L.
Avenida Penalver, Campo Baker Atlas
El Tigre, Anzoátegui
Venezuela |
| 48. Baker Hughes S.R.L.
Avenida Principal de La Castellana
Edificio Centro Letonia
Torre ING Bank Piso 11
Caracas, 1060
Venezuela | 51. Baker Hughes S.R.L.
Av. Alirio Ugarte Pelayo
Piso 1 Ala Sur (Frente PDVSA)
Maturín
Venezuela |
| 49. Baker Hughes S.R.L.
Avenida Intercomunal, Sector Las Morochas
Via Terminales Maracaibo
Ciudad Ojeda, Zulia
Venezuela | 52. Baker Hughes S.R.L.
Av. Cuatricentenaria, Municipio Barinas (next to POLAR)
Barinas, Barinas
Venezuela |

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