

**IMPORT AND EXPORT LICENSE**

NRC FORM 250P (12/05)



**United States of America**

Nuclear Regulatory Commission  
Washington, D.C. 20555

**NRC LICENSE NO.: CBP5a-1**

**LICENSE EXPIRES:** December 31, 2009

Page 1 of 4

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.

<p align="center"><b>LICENSEE</b></p> <p align="center">International Isotopes, Inc. ATTN: John J. Miller 4137 Commerce Circle Idaho Falls, Idaho 83401</p> <p align="center">APPLICANT'S REFERENCE: JJM-2007-23</p>	<p align="center"><b>ULTIMATE FOREIGN CONSIGNEE(S)</b></p> <p align="center">Listed on Page 3.</p>
<p align="center"><b>INTERMEDIATE FOREIGN AND/OR DOMESTIC CONSIGNEE(S)</b></p> <p align="center">NONE</p>	<p align="center"><b>OTHER PARTY(IES) TO IMPORT/EXPORT</b></p> <p align="center">NONE</p>

**COUNTRY(IES) OF ULTIMATE DESTINATION:** Argentina, Australia, Bolivia, Brazil, Canada, France, Germany, Greece, Guatemala, Mexico, Paraguay, Portugal, Spain, United Kingdom, and United States. (See Page 4 for conditions.)

**CONDITIONS, NOTES, AND DESCRIPTIONS 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 Brazil and Mexico, Category 1 and Category 2 quantities of Cobalt-60, as metal and/or in special form contained in sealed source for use in medical teletherapy devices and Category I, II, and III irradiators. For Category 1 exports, see conditions on Page 4.

Import and export, from and to Argentina, Australia, Bolivia, Canada, France, Germany, Greece, Guatemala, Paraguay, Portugal, Spain, United Kingdom, and United States' Category 1 and Category 2 quantities of Cobalt-60 and Cesium-137, as metal and/or in special form contained in sealed sources for use in medical teletherapy devices and Category I, II, and III irradiators. For Category 1 exports, see conditions on Page 4.

International Isotopes, Inc. is responsible for compliance with all applicable import, export, and other domestic regulatory requirements, including all terms and conditions of domestic materials license(s). International Isotopes, Inc. must submit information required by 10 CFR §110.32(d) and pertinent documentation required by 10 CFR §110.32(h) at least **24 hours prior to shipment**. See Page 2 Mandatory Notifications.

License expiration date is based on shipment dates and contingency period.

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

*Margaret M. Doane*

NAME AND TITLE: Margaret M. Doane, Director  
Office of International Programs

DATE OF ISSUANCE: December 19, 2007

**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) <sup>1</sup>	Terabequerels (TBq)	Curies (Ci) <sup>1</sup>
Americium-241	60	1,600	0.6	16
Americium-241/Beryllium	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-238 <sup>2</sup>	60	1,600	0.6	16
Plutonium-239/Beryllium <sup>2</sup>	60	1,600	0.6	16
Promethium-147	40,000	1,100,000	400	11,000
Radium-226 <sup>3</sup>	40	1,100	0.4	11
Selenium-75	200	5,400	2.0	54
Strontium-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	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

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

**MANDATORY NOTIFICATIONS:** 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. Difficulties notifying the U.S. Nuclear Regulatory Commission must be promptly reported to the Office of International Programs' import/export licensing staff at (301) 415-2342 or 415-1678.

<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>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.

<sup>3</sup> Discrete sources of Radium-226.

**ULTIMATE FOREIGN CONSIGNEE(S)**

Fundacao de Saude Dilson de  
Quadros Godinho  
Av. Geraldo Athayde, 480 Sao Joao  
Monte Claros, MG  
**Brazil**

HC da Faculdade de Medicina Estadual  
Julio de Mesquita Filho  
Campus de Botucatu Rubiao Junior  
18618-970 Butucatu, SP  
**Brazil**

Hospital Luxemburgo  
30380490 - Belo Horizonte, MG  
**Brazil**

Hospital Santa Rita de Cassia  
Av. Marechal Campos  
1579 Santos Dumont  
29040-091 Vitoria, ES  
**Brazil**

Instituto de Cancer Arnaldo Vieira  
de Carvalho  
Dr. Cesario Motta, Jr.  
122-Sta. Cecilia  
01221-900 Sao Paulo, SP  
**Brazil**

Instituto de Medicina Nuclear e  
Endocrinologia  
Rua Cons. Otaviano, 129 Centro  
28010-140 Campos, RJ  
**Brazil**

IRABC - Instituto de Radioterapia Do ABC  
Av. Portugal, 592 Centro  
09040-000 Santo Andre, SP  
**Brazil**

Irmandade la Santa Casa da Misericordia  
de Santos  
Av. Dr. Claudio Luiz da Costa, 50  
11075-900 Santos, SP  
**Brazil**

Nucleon Radioterapia E. Fisica  
Medica S/C Ltda.  
Av. Washington Luiz, 773  
18035-060 Sorocaba, SP  
**Brazil**

Quantum Assessoria em Fisica  
Medica Ltda.  
R. Carolina Moraes de Almeida, 149  
Marlina, SP  
**Brazil**

Leonel Humberto Perez Landeros  
Orquides Ponienta No. 120, Orquidea  
San Luis Potsol, S.L.P. 78200  
**Mexico**

Instituto de Radioterapia de Baja California  
Rufino Tamayo No. 9, Zona Rio  
Tijuana, B.C.N. 22320  
**Mexico**

//////////////////////////////////////END//////////////////////////////////////

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

International Isotopes, Inc. is prohibited from shipping 10 CFR §110 Appendix P Category 1 quantities of Cobalt-60 and Cesium-137 to Argentina, Australia, Bolivia, Brazil, Canada, France, Germany, Greece, Guatemala, Paraguay, Portugal, Spain, United Kingdom until [1] International Isotopes, Inc. requests the U.S. Nuclear Regulatory Commission (NRC) to obtain specific consent from the importing country's regulatory authority, on a case-by-case basis; [2] NRC has considered government-to-government consent pursuant to 10 CFR §110.42(e)(3); and [3] NRC informs International Isotopes, Inc., in writing, that it is authorized to ship the materials to the recipient(s) specified.

Validity period of government consent from importing state of **Mexico** expires when this license expires.

This license replaces CBP0005a and amends its authority to 1) change the expiration date from September 10, 2010, 2) add Category 1 Cesium-137; 3) add foreign consignees in Brazil and Mexico, and 4) add Argentina, Australia, Bolivia, Canada, France, Germany, Greece, Guatemala, Paraguay, Portugal, Spain, United Kingdom as future countries for exports and imports.

//////////////////////////////////////END//////////////////////////////////////