



**International Isotopes Inc.**  
& *International Isotopes Idaho Inc.*

June 16, 2005

Mr. Michael Raddatz, Sr.  
Uranium Processing Section  
Division of Fuel Cycle Safety and Safeguards  
Office of Nuclear Material Safety and Safeguards  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Subject: Response to U. S. NRC Comments Regarding the International Isotopes Inc  
Source Material License Application (TAC LU0086)

Dear Mr. Raddatz,

International Isotopes Inc. appreciates the effort you have taken to provide timely comments regarding the source material application submitted April 21, 2005. I have included International Isotopes Inc.'s response to Nuclear Regulatory Commissions comments 1 and 2 below. A response to Comment number 3 will be provided in separate correspondence.

**NRC Comment:**

1. A Part 40 licensee is subjected to the requirements listed in 10 CFR 40.64 "Reports". This section deals with completing transaction reports, yearly reporting of material status reports, and thresholds for reporting theft or diversion. Related to these requirements, there is not sufficient information in the submitted materials to make a determination in this arena.
  - a. How will you comply with 40.64(a) if you receive and/or ship source material with foreign treaty obligations?
  - b. In terms of 40.64(b), since you will be licensed to possess more than 100 kgs of source material, state how you will comply with annual reporting requirements associated with source material with foreign obligations.

**I<sup>3</sup> Response:**

International Isotopes Inc. has identified a domestic supply of depleted uranium tetrafluoride and does not anticipate a current or future need to import depleted uranium tetrafluoride with foreign treaty obligations. However, there may be an opportunity to export depleted uranium oxide, chemical form U<sub>3</sub>O<sub>8</sub>, for sale as a chemical catalyst. Should this opportunity arise International Isotopes Inc will comply with the electronic reporting requirements cited in §40.64 (a) using the guidance provided in latest revision of NUREG/BR-0006, *Instructions for Completing Nuclear Material Transaction Reports*. In accordance with §40.64 (b), International Isotopes Inc. will provide an annual report within 30 days of September

30 of each year NUREG/BR-0007, *Instructions for the Preparation and Distribution of Material Status Reports*. This report will be provided electronically in the required XLM format. International Isotopes Inc has contacted Mr. Brian Horn, with the US Nuclear Regulatory Commission, for assistance in setting up a reporting identification symbol for the Nuclear Material Management and Safeguards System reporting. International Isotopes Inc. will apply for an RIS within 10 days of license issuance.

**NRC Comment:**

2. There are references in the submitted materials to sealed sources
  - a. It is not clear what those sources might be comprised of. If any of them would contain special nuclear material (plutonium or uranium enriched in 233 or U235) then there is insufficient information to determine the possible applicability of Part 70.

**I<sup>3</sup> Response:**

The sealed sources referenced in the application fall in the calibration and reference source category and would be utilized to support the facility radiation detection instrumentation.

Isotope	Activity (uCi)	Form	Use
Th-230	$1.55 \times 10^{-2}$	Electroplated Disk	Alpha radiation response check
Tc-99	$1.45 \times 10^{-2}$	Mylar Covered Plate	Beta radiation response check
Tc-99	$2.25 \times 10^{-3}$	Mylar Covered Plate	Beta radiation response check

During the course of operations, new radiation detection instruments may be identified which require additional calibration and reference sources. Prior to acquiring additional reference and calibration sources, International Isotopes Inc. will evaluate sealed sources against the applicable regulations, i.e. §70.19 *General license for calibration or reference sources* and any specific license restrictions to ensure compliance with the regulations and our specific license. International Isotopes Inc. does not anticipate a need for sealed sources containing enriched U-233 or U-235.

Should you have any questions, please contact me by phone at (208) 524-5300 or by email at [jjmiller@intisoid.com](mailto:jjmiller@intisoid.com).

Sincerely,



John J. Miller, CHP  
Radiation Safety Officer

cc:

J. J. Miller file (JJM-2005-15)