



International Isotopes Inc.
& International Isotopes Idaho Inc.

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September 28, 2005

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Secretary, U.S. Nuclear Regulatory Commission.
Washington, D.C. 20555-0001
Attn: Rulemakings and Adjudications Staff

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

Subject: International Isotopes Inc Comments Regarding Proposed National Source
Tracking of Sealed Sources Rule (RIN 3150-AH48)

Dear Secretary,

Please find International Isotopes Inc. (INIS) comments regarding the proposed National
Source Tracking of Sealed Sources Rule.

INIS Comment Number 1:

The proposed rule should provide more clarification in regards to source recycling. The
discussion session states:

*Some sources are recycled or reconfigured. For example, a source that has decayed
below its usefulness is sometimes returned to the manufacturer for reconfiguration. The
decayed source may be placed in a reactor and reactivated. The source retains its serial
number, but now has a new activity. The new activity and date must be reported to the
National Source Tracking System.*

Another and more probable method of recycling would be to disassemble one or more
nationally tracked sources to recover the activity for utilization in the manufacture of
one or more new sources. In the case the licensee would remove the sources from the
data base after disassembly and then report new sources to the system as they are
manufactured. As an example, since November of 2004, International Isotopes Inc.
has disassembled 1809 Co-60 sources that would be tracked on in the National
Source Tracking Data Base. The Co-60 sources recovered from these sources have
been manufactured into 2 teletherapy sources and a 3rd irradiator source is in the
process of manufacture. This accounts for a total activity of nearly 20,000 Ci.

Additional aspects of recycling that need to be considered are:

- a. Recycling is not 100% effective – some waste will be generated
- b. Any number of sealed sources may be used to fabricate any number of
“new sources”.

- c. Recycle of the source may fail and require the source to be disposed of as waste.

The database should take these aspects into account in that the recycling transaction should be treated very similar to the disposal transaction without the waste manifest number.

Suggest rewording §20.2207 (changes in **bold underlined text**)to read:

§20.2207 Reports of transactions involving nationally tracked sources.

Each licensee who manufactures, transfers, receives, **recycles** or disposes of a nationally tracked source shall complete and submit a National Source Tracking Transaction Report (NRC Form 748) as specified in paragraphs (a) through (d) of this section for each type of transaction.

(a) Each licensee who manufactures a nationally tracked source shall complete and submit a National Source Tracking Transaction Report (NRC Form 748). The report must include the following information:

- (1) The name and license number of the reporting licensee;
- (2) The name of the individual preparing the report;
- (3) The manufacturer, model, and serial number of the source;
- (4) The radioactive material in the source;
- (5) The initial source strength in becquerels (curies) at the time of manufacture; and
- (6) The manufacture date of the source.

(b) Each licensee that transfers a nationally tracked source to another person shall complete and submit a National Source Tracking Transaction Report (NRC Form 748). The report must include the following information:

- (1) The name and license number of the reporting licensee;
- (2) The name of the individual preparing the report;
- (3) The name and license number of the recipient facility and the shipping address;
- (4) The manufacturer, model, and serial number of the source or, if not available, other information to uniquely identify the source;
- (5) The radioactive material in the source;
- (6) The initial or current source strength in becquerels (curies);
- (7) The date for which the source strength is reported;
- (8) The shipping date;
- (9) The estimated arrival date; and
- (10) For nationally tracked sources transferred as waste under a Uniform Low-Level Radioactive Waste Manifest, the waste manifest number and the container identification of the container with the nationally tracked source.

(c) Each licensee that receives a nationally tracked source shall complete and submit a National Source Tracking Transaction Report (NRC Form 748). The report must include the following information:

- (1) The name and license number of the reporting licensee;
- (2) The name of the individual preparing the report;
- (3) The name and license number of the person that provided the source;
- (4) The manufacturer, model, and serial number of the source or, if not available, other information to uniquely identify the source;
- (5) The radioactive material in the source;
- (6) The initial or current source strength in becquerels (curies);
- (7) The date for which the source strength is reported;
- (8) The date of receipt; and
- (9) For material received under a Uniform Low-Level Radioactive Waste Manifest, the waste manifest number and the container identification with the nationally tracked source.

(d) Each licensee who recycles of a nationally tracked source shall complete and submit a National Source Tracking Transaction Report (NRC Form 748). The report must include the following information:

- (1) The name and license number of the reporting licensee;
- (2) The name of the individual preparing the report;
- (3) The manufacturer, model, and serial number of the source or, if not available, other information to uniquely identify the source;
- (4) The radioactive material in the source;
- (5) The initial or current source strength in becquerels (curies);
- (6) The date for which the source strength is reported;
- (7) The date of disassembly;

(e) Each licensee who disposes of a nationally tracked source shall complete and submit a National Source Tracking Transaction Report (NRC Form 748). The report must include the following information:

- (1) The name and license number of the reporting licensee;
- (2) The name of the individual preparing the report;
- (3) The waste manifest number;
- (4) The container identification with the nationally tracked source;
- (5) The date of disposal; and
- (6) The method of disposal.

(f) The reports discussed in paragraphs (a) through (e) of this section must be submitted by the close of the next business day after the transaction. A single report may be submitted for multiple sources and transactions. The reports must be submitted to the National Source Tracking System by using:

- (1) The on-line National Source Tracking System;
- (2) Electronically using a computer-readable format;
- (3) By facsimile;

- (4) By mail to the address on the National Source Tracking Transaction Report Form (NRC Form 748); or
- (5) By telephone with follow up by facsimile or mail.

(g) Each licensee shall correct any error in previously filed reports or file a new report for any missed transaction within 5 business days of the discovery of the error or missed transaction. Each licensee shall reconcile and verify the inventory of nationally tracked sources possessed by the licensee against that licensee's data in the National Source Tracking System. The verification must be conducted during the month of June in each year. The reconciliation process must include resolving any discrepancies between the National Source Tracking System and the actual inventory by filing the reports identified by paragraphs (a) through (e) of this section.

(h) Each licensee that possesses Category 1 nationally tracked sources shall report its initial inventory of Category 1 nationally tracked sources to the National Source Tracking System by December 31, 2006. Each licensee that possesses Category 2 nationally tracked sources shall report its initial inventory of Category 2 nationally tracked sources to the National Source Tracking System by March 31, 2007. The information may be submitted by using any of the methods identified by paragraph (f)(1) through (f)(4) of this section. The initial inventory report must include the following information:

- (1) The name and license number of the reporting licensee;
- (2) The name of the individual preparing the report;
- (3) The manufacturer, model, and serial number of each nationally tracked source or, if not available, other information to uniquely identify the source;
- (4) The radioactive material in the sealed source;
- (5) The initial or current source strength in becquerels (curies); and
- (6) The date for which the source strength is reported.

INIS Comment Number 2:

Form 748 Block 2, Type of Transaction should include recycle.

INIS Comment Number 3:

Section I, What Information Would be Reported on Source Endpoints? Lists decay as an endpoint. The section expands further stating the database will calculate decay and automatically remove source from the database once it has decayed below the Category 2 threshold. Recommend an addition to §20.2207 that would acknowledge the relief from reporting. The last paragraph of §20.2207 could read:

(J) Sources which decay below the Category 2 activity threshold value are automatically removed from the National Source Tracking System, therefore no reporting is required by the licensee.

INIS Comment Number 4:

In consideration of INIS Comment Number 1, the proposed §150.18 should address recycling and decay and be worded in a manner similar to that suggested for §20.2207.

INIS Comment Number 5:

General Comment: The rule does not allow any latitude for sources which belong to a specific source set, for example, the gamma knife sources comprise 201 distinct sealed sources per set, each source serialized sequentially and each source having nearly equal activities. A provision should be made to allow licensees to address multiple sources with a single transactional entry.

INIS Comment Number 6:

General Comment: Category 3 sources should not be included now or in the future. Implementing standards more stringent than the IAEA code of conduct will certainly generate confusion and not integrate the USA plan with international efforts in this regard.

INIS Comment Number 7:

General Comment: Thresholds for source tracking should be based solely upon the Category 1 and 2 limits for each source. Including sources because a licensee possesses a total number of sources that could exceed some arbitrary threshold will generate a great deal of confusion and not add security or control of materials. Total limits for sources in possession by licenses should be regulated by their individual licenses and not the National Source tracking program.

INIS Comment Number 8:

General Comment: The tracking system will need to be able to accommodate data entries for sources that are imported into this country that were manufactured and exported before the rule went into effect.

INIS Comment Number 9:

General Comment: Time to report: Reporting transactions within the close of the next business day may be too stringent. Suggest within 5 business days. In many instances a multiple number of licensees will possess a source which is being tracked in a short time period. For example, sources which are changed out by service providers, the original licensee will transfer custody to the service provider who in turn removes the source from the unit and then ships to a 3rd licensee for recycle, reuse or disposal. This transaction could occur in a matter of days and would include transportation time. Extending the

reporting requirement to 5 business days will enable licensees involved in the transaction to verify the transaction has been completed.

INIS Comment Number 10:

General Comment: The tracking system will need to be able to accommodate data entries for sources that are imported into this country that were manufactured and exported before the rule went into effect

INIS Comment Number 11:

General Comment: The notification system should include an automatic e-mail notification when a sender designates a specific licensee in a transfer entry. This would allow rapid identification of errors in the system at the time of transfer.

INIS Comment Number 12:

General Comment: The definition of a Nationally Tracked Sealed Source uses the phrase "permanently sealed". With any recycling considerations the definition should be changed to delete "permanently".

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

Sincerely,

A handwritten signature in black ink, appearing to read 'John J. Miller', followed by a long horizontal flourish line.

John J. Miller, CHP
Radiation Safety Officer

cc:

J. J. Miller file (JJM-2005-21)

From: "John J. Miller" <jjmill@intisoid.com>
To: <secy@nrc.gov>
Date: Wed, Sep 28, 2005 4:49 PM
Subject: Comments on National Source Tracking of Sealed Sources Proposed Rule

Please find International Isotopes Inc comments on the proposed rule in the attached file. (pdf and word format attached)

John J. Miller, CHP
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CC: "Merri Horn" <mlh1@nrc.gov>

Mail Envelope Properties (433B01B9.B76 : 9 : 52086)

Subject: Comments on National Source Tracking of Sealed Sources Proposed Rule

Creation Date: Wed, Sep 28, 2005 3:14 PM

From: "John J. Miller" <jjmiller@intisoid.com>

Created By: jjmiller@intisoid.com

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Files

	Size
MESSAGE	272
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JJM-21-2005.pdf	601082
JJM-2005-21_NRC_NST_Comments.doc	
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Options

Expiration Date:	None
Priority:	Standard
Reply Requested:	No
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Concealed Subject:	No
Security:	Standard