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U.S. National Source  
Tracking System (NSTS) Update  
February 9, 2011

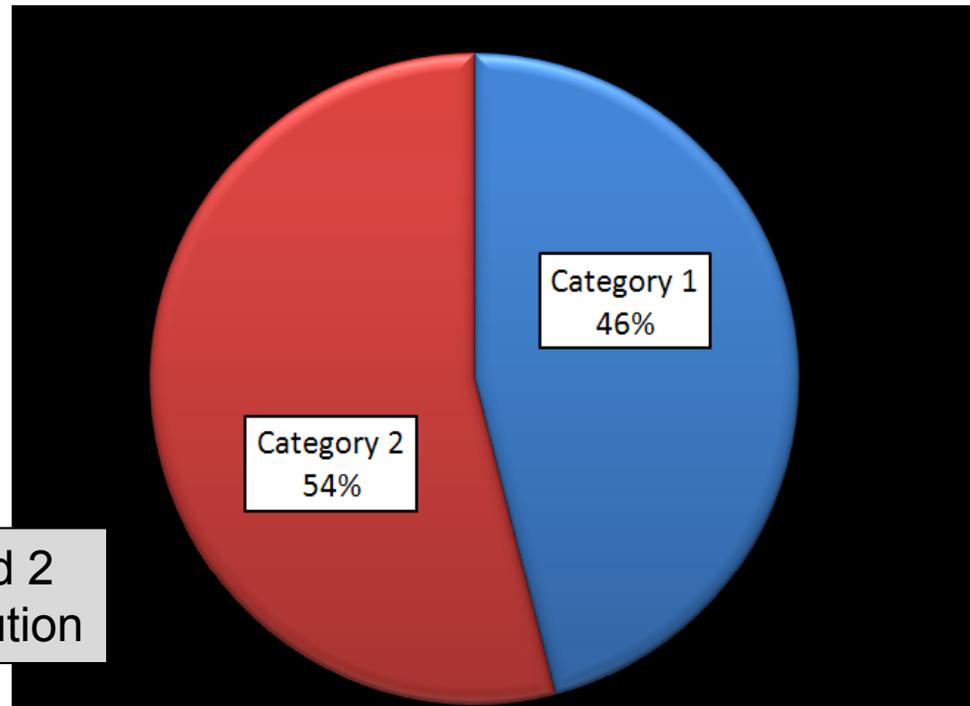
Ernesto Quinones  
U.S. Nuclear Regulatory Commission

# Overview

**NSTS  
objective**

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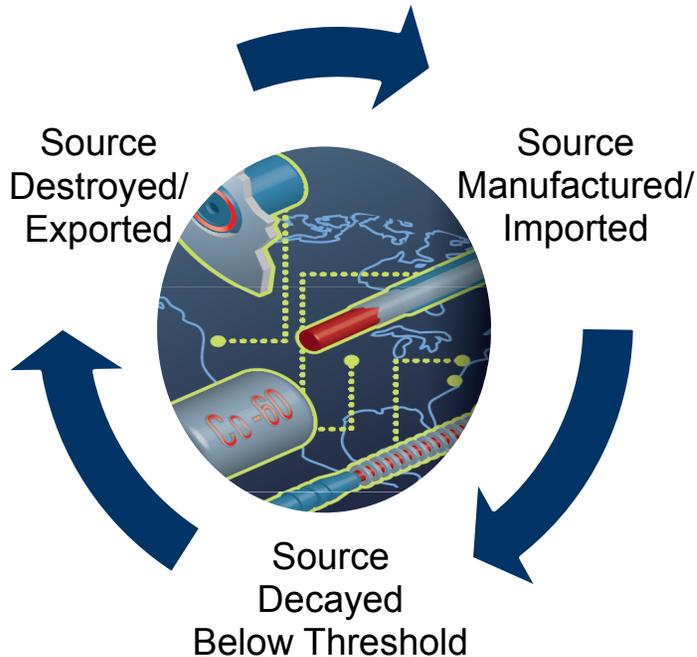
Up-to-date accounting of all Category 1 and Category 2 sources in the U.S.



Category 1 and 2  
Source distribution

# What is NSTS?

## Source Life Cycle



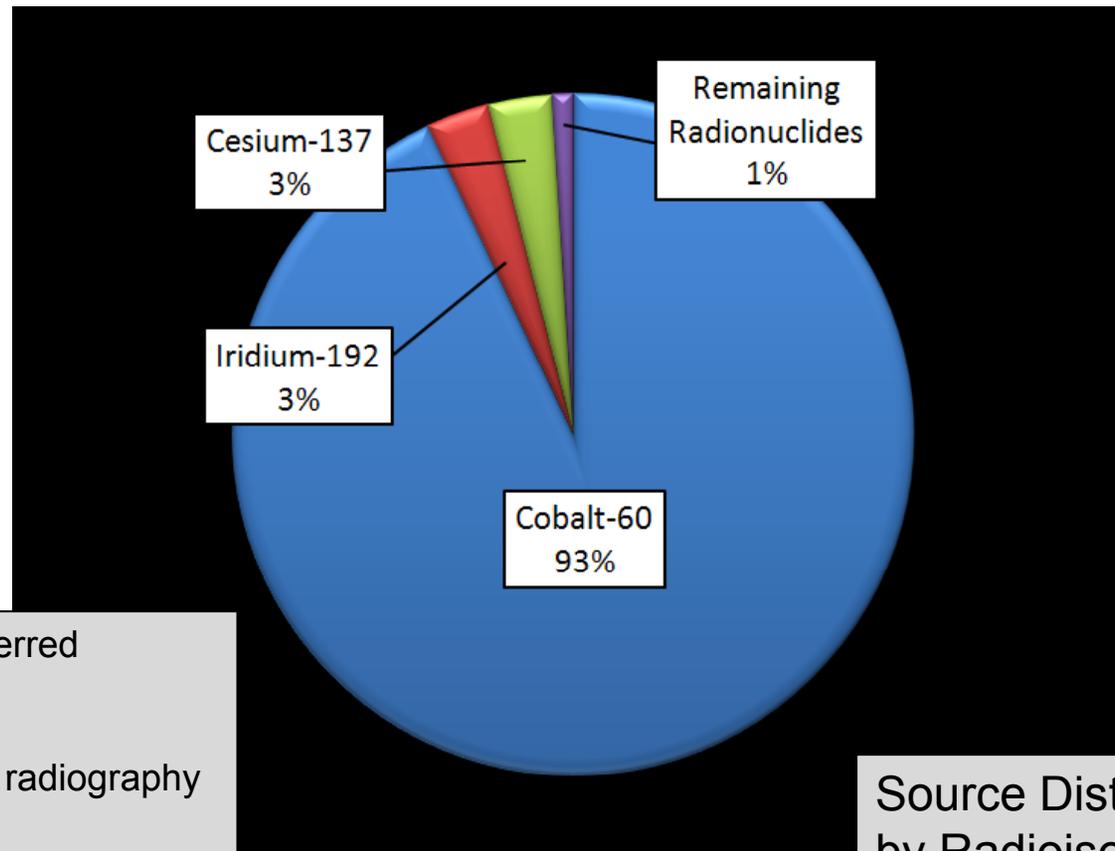
**Transaction Reporting  
Transfer, Receipt,  
Import, Export**



**Annual Inventory  
Reconciliation**

The relevant regulations that discuss the NSTS are found in 10 CFR § 20.2207 and state that each licensee who manufactures, transfers, receives, disassembles, or disposes of a nationally tracked source must complete and submit a National Source Tracking Transaction Report.

# Where We Are Today



- Iridium-192 is the most transferred source in NSTS
- Current focus is on industrial radiography sources (3%)

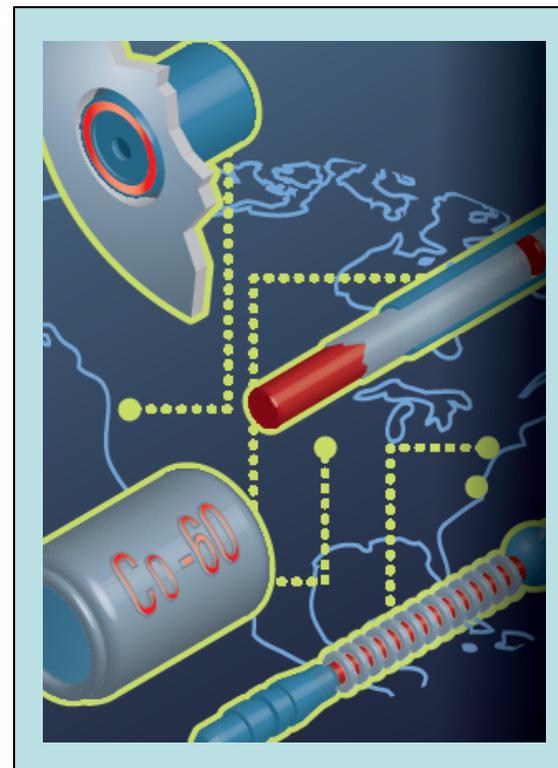
Source Distribution by Radioisotope

# Focus on NSTS To-Date

- Extensive outreach efforts to encourage online usage
- Highest volume licensees reporting through electronic means
- Extensive effort to ensure data integrity
- Credentialed more than 1,000 users
- Licensees confirmed their source inventories for the second time
- Several Maintenance Releases deployed

# NSTS Reporting Issues

- Failure to report transactions
- Inaccurate reporting of import/export transactions
- Reporting transactions for work at temporary job sites
- Reporting multiple sources as a single source
- Reporting transactions of below threshold sources
- Decay calculation discrepancies



# Form 748 Common Reporting Errors

- Omission of required fields
- Misreporting of source makes and models (device makes/models)
- Illegible information (handwritten)
- Incorrect license numbers (sending or receiving license numbers)
- Inaccurate transfer information (inconsistent license numbers on transfer and receipt transactions)

**Example of Completed Form 748 - Incorrect Receipt**

**NATIONAL SOURCE TRACKING TRANSACTION REPORT**

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3160-0202 EXPIRES: 06/30/2009

1. LICENSEE

A. LICENSEE NAME AND ADDRESS  
NNS, Inc.  
28 York Avenue  
Denver, CO 80206

B. LICENSE NO. 4000-20

C. DOCKET NO.

2. TYPE OF TRANSACTION  NEW  CORRECTION

RECEIPT  DISASSEMBLE

TRANSFER  REPORT SOURCE

3. DATE OF TRANSACTION 05/16/2009

4. PREPARER

A. NAME OF PREPARER Jerry Staib

B. DATE PREPARED 05/16/2009

C. TELEPHONE NO. OF PREPARER (303) 439-4954

5. COMMENT Received from Source Manufacturer

6. SOURCE DATA

A. MANUFACTURER Source Manufacturing, Inc. B. MODEL NO. 12 C. SERIAL NO. 5173 D. RADIOACTIVE MATERIAL Iridium-192 E. ACTIVITY AND UNIT 100 Ci F. ACTIVITY DATE 05/14/2009 G. SOURCE MANIFEST NO. H. CO.

7. RECEIPT DATA

A. NAME AND ADDRESS OF SHIPPER

B. LICENSE NO.

C. DOCKET NO.

D. COMMENT

8. DISPOSAL DATA

A. WASTE MANIFEST NO. B. CONTAINER ID C. METHOD OF DISPOSAL D. COMMENT

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECTS. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

NRC FORM 748 (11-2008) PRINTED ON RECYCLED PAPER

# Issues with Faxing Form 748

- Faxes submitted by licensees are not always received
  - Static on fax line resulting in scrambled text, partial receipt of fax (cut off), or no receipt at all
  - Faxes sent with the paper upside down
- Use a cover sheet so the NSTS Help Desk has a way to contact you to let you know there is a problem with your transaction submission
- Request confirmation from the help desk – if not received, follow up! The Help Desk may not have received your report!



# Annual Inventory Reconciliation

- New process

- Inventories were generated the last two weeks in December

- Inventory Reports mailed to RSO; certified mail, to the facility street address

- Reconciliation is as of the date on the Inventory report

- Coversheets for fax submissions were pre-populated with the licensee information

- Ensure the name is legible on the inventory verification so it can be processed

Official Use Only - Security-Related Information

Version 1.2

**National Source Tracking System** NRC Home | FSIS Home  
NSTS Contact

**U.S. Nuclear Regulatory Commission** Federal and State Materials and Environmental Management Programs

Today's Date: 11/03/2009 Licensee user (license number: 221-554-465) Back to Main Menu

User ID: WAA02

**Annual Inventory Reconciliation Report** Help

Licensing Agency	License Number	Facility Number	Licensee Name	License Category	Street Address	Company Phone	Primary Contact	Primary Contact Phone
U.S. Nuclear Regulatory Commission	221-554-465	50865890	John Hopkins Medical Center	Disposer	1085 Capital Avenue, NW Mailstop 06A10 Washington DC 20210		Angela Randall	202-498-6000

Source No.	Make	Model	Serial Number	Source ID	Isotope Name	Activity	Activity Date	In Transit
1	Amerisham Health	RAM-TYPE FOL	112807-1	1	Radium-226	299.951	05/21/2009	Yes
2	Amerisham Health	RAM-TYPE FOL	112807-6	6	Radium-226	1996.72	05/21/2009	Yes
3	Amerisham Health	RAM-TYPE FOL	112807-7	7	Radium-226	1996.72	05/21/2009	Yes
4	Amerisham Health	RAM-TYPE FOL	112807-8	8	Radium-226	1996.72	05/21/2009	Yes
5	Amerisham Health	RAM-TYPE FOL	112807-9	9	Radium-226	1996.72	05/21/2009	Yes
6	Campbell Industries	V-380	d111	161	Americium-241	11.0	11/22/2008	Yes
7	Idaho	Idaifa	d111	162	Californium-252	11.0	11/22/2008	Yes
8	Idaho Industrial Instruments, Inc.	A424-19	B-112807-5	20	Cobalt-60 Actinium-227	741.98 572.487	05/21/2009	Yes
9	Idaho Industrial Instruments, Inc.	A424-19	B-112807-6	21	Cobalt-60 Actinium-227	741.98 572.487	05/21/2009	Yes

Export options: [Excel](#) | [PDF](#)

NRC Disclaimer  
NRC regulation 101.11 requires the licensee review and confirm their inventory annually. Failure to do so, your licensee will be involved... more text here.

These regulations apply to all licensees who use the National Source Tracking System (NSTS) application.

Signature: \_\_\_\_\_ Name: \_\_\_\_\_ Date: \_\_\_\_\_

[Verify Annual Inventory](#) [Cancel](#) [Print Inventory Report](#)

Official Use Only - Security-Related Information

Figure 3-2: Annual Inventory Reconciliation Report

# Forward Focus

- New Form 748

- Intuitive design for simple entry

- Ability to save data

- Email capability

- Individual forms for single transactions

- Long form for multiple transaction types

# Marketing Effort

- Contracted with marketing firm to gain insights on how to increase usage of online NSTS
  - Advantages of online NSTS vs other methods
  - Barriers to using online NSTS
  - How online NSTS compares/differs from other online systems
  - Effectiveness of NSTS Help Desk
  - Feedback on online credentialing process
  - Feedback on NSTS outreach
  - Input on media and communications preferences

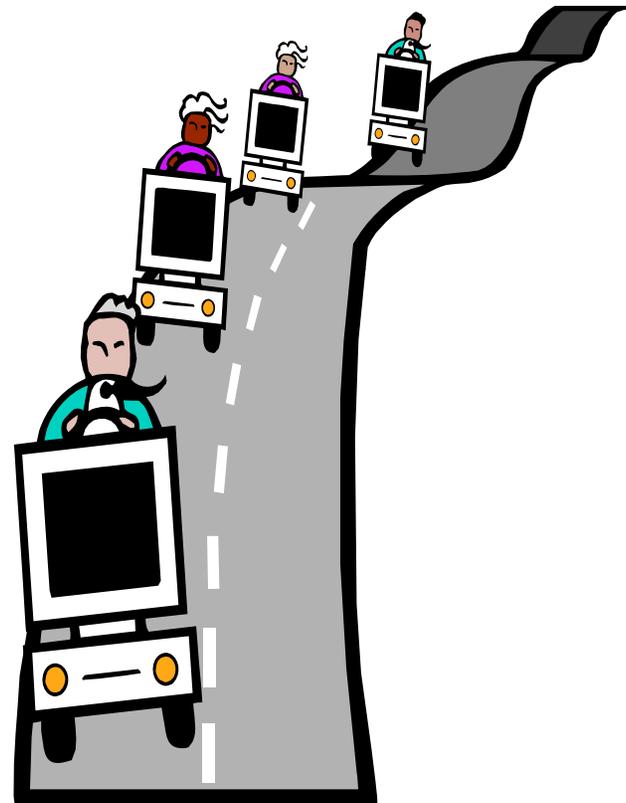
# Latest NSTS Maintenance Release

- Maintenance release 1.4 was deployed in December
  - Addition of 'Previous' button on several screens
  - Changes to layout of Annual Inventory Reconciliation report
  - Better tracking of overall progress of reconciliation
  - Fixed errors



# Forward Focus

- NSTS Version 2 – Spring 2011
  - Pending/Overdue transfer notifications
  - Import/Export notifications
  - Source history
  - Licensee transfer history
  - Reports



# Questions & Answers

