



National Source Tracking System (NSTS) Industrial Radiography Training Guide

September 9, 2009



Lockheed Martin





Overview NSTS

Background

The events of September 11, 2001 heightened the nation's concerns regarding the use of radioactive materials for a malevolent act. Such an attack has been of particular concern due to the widespread use of radioactive materials (often contained in sealed sources) in the United States and overseas by industry, hospitals, and academic institutions. Loss or theft of such materials could lead to a malicious use of a radiological dispersal device (RDD) also known as a "dirty bomb" — a conventional explosive that carries nuclear materials and releases them on detonation.

In July 2002, the Nuclear Regulatory Commission (NRC) and the Department of Energy (DOE) established an RDD Working Group to investigate how to improve the control of nuclear material or radioactive sources. One recommendation of the Working Group was to develop a national source tracking system to better understand and monitor the location and movement of sources of interest. To track source transfers in a timely manner, the Working Group also recommended that the system be Web-based, allowing most source transfers to be recorded directly by licensees using the Internet. The NRC adopted this recommendation in its directive to the staff, SRMCOMSECY-03-0010, updated most recently in SRM-M040309A, dated March 12, 2004. The NRC began activities needed to develop and implement sealed source tracking regulations and the National Source Tracking System (NSTS) in late 2003.

Objectives

The NSTS provides a "cradle-to-grave" account of the origins of each source (manufacture, remanufacturing, or import) and records by whom it has been used and eventually disposed of, or exported. The NSTS is a national centralized database that satisfies the International Atomic Energy Agency (IAEA) Code of Conduct. The NSTS will help the NRC and other agencies to:

- Monitor the location, use, and disposal of sources;
- Improve accountability and provide better information to decision makers;
- Detect and act on discrepancies;
- Conduct inspections and investigations;
- Communicate source information among government agencies;
- Respond in the event of an emergency; and
- Verify legitimate import, export, ownership, and use of sources.

Scope

The NSTS can be accessed by affected nuclear materials licensees nationwide, including nuclear source manufacturers, users, distributors, disposers, and waste brokers. The NSTS is accessible via the Web to relevant staff members of the NRC, it's Agreement State agencies, and the Department of Energy (DOE). Additional indirect users (i.e., of reports or downloads) include relevant staff of other federal agencies including the Department of Homeland Security (DHS) and the Department of Transportation (DOT).





Overview

Interface Design

1. <u>Columns</u> can be sorted. Click once to sort ascending and twice to sort descending. Only columns with underlined blue headers can be sorted; columns with non-underlined black headers cannot.



The NRC Logo and associated graphical images are present on the header section of all Web pages, as depicted below:



- 2. <u>Links</u> labeled "**Print**", "**Logout**", "**NRC Home**" and "**FSME Home**" are present in the header section of all Web pages. "**Help**" links are present on all pages with help topics.
- 3. <u>Mandatory fields</u> have an asterisk (*) beside them and a line of text that reads, "**indicates required field**."

Note: * indicates required field.	Serial Number *:	
	G0 5-19 G0 C0 C0 50 30 12 G0 C0	1

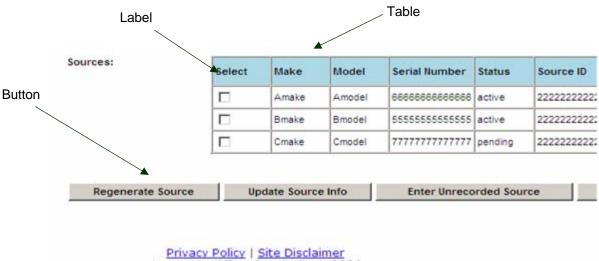




Overview

Interface Design (cont.)

- 4. Labels are left-aligned.
- 5. <u>Tables</u> have column headers. Text displayed in a table is left-justified; numeric values in a table are right-justified.
- 6. Buttons (e.g., to submit a page) appear at the bottom of the page and are left-justified.



Last revised Tuesday, April 11, 2006

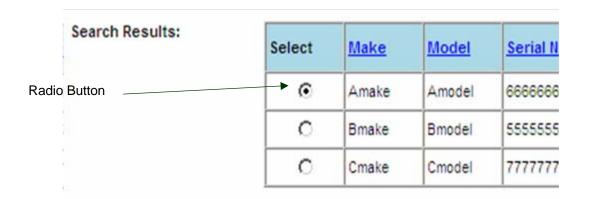




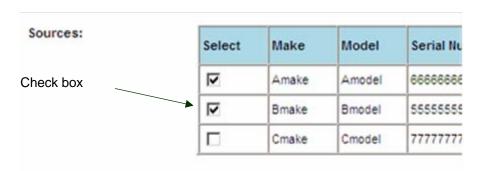
Overview

Interface Design (cont.)

- 7. Long lists have scroll bars.
- 8. <u>Radio Buttons</u> are used to list two or more options that are mutually exclusive. You must select exactly one choice. There is a default selection.



- 9. <u>Check boxes</u> are used when there is a list of options. You may select any number of choices, including zero, one, or several.
- 10. A stand-alone check box is used for a single option that you can either select or clear.









Overview

Search Features

Search criteria helps to narrow and filter search results.

Entering multiple search criteria will return results that contain **all** of the entered search criteria. For example, entering Make X, Model Y, and Device ABC will return results that contain all three values. Values that contain only one of the search criteria will not be displayed.

If no results are returned on a particular query, eliminating some of the entered search criteria may help.

Wildcard searches are permitted in text entry fields. A wildcard is a character that may be used in a search term to represent one or more characters.

An asterisk (*) may be used to specify zero or more alphanumeric characters. For example, searching for the term 'h*s' would yield results that contain such words as "his," "homes," "horses," "horticulturalists," and "herbaceous."

Search Criteria:	Make	Please select Make	Device Make	
	Model	First choose Make	Device Model	
	Serial Number		Device Serial Number	
	Source ID		Alternate Source ID	
	Isotope	First choose Make and Moc	Select Operator	Select Uni
	Address City		State	Select State





Overview

Logon

To logon to the NSTS application, insert your Smart Card into the card reader, which connects to the application URL via your web browser.

From your Internet Explorer web browser, access the NSTS Website with the URL: https://nsts.nrc-gateway.gov/nsts/welcome.do. Green light on card reader will indicate connectivity.

On the Choose a digital certificate screen, click "OK."



Enter your PIN at the prompt and click OK.







Overview

Logon (cont.)

If the following Security Alert screen appears, click Yes.







Click the "I Accept" button if you agree to the terms and conditions for system usage.



Welcome to National Source Tracking System (NSTS)

USE OF THIS COMPUTER CONSTITUTES CONSENT TO MONITORING.

This computer system is for official or authorized use only. Federal computer systems are subject to monitoring for maintenance, to preserve system integrity and security, and for other official purposes. You should not expect privacy, nor protection of privileged communication with your personal attorney, regarding information you create, send, receive, use, or store on this system.

If monitoring reveals possible evidence of violation of criminal statutes, this evidence and any related information, including your identification, may be provided to law enforcement officials, including the Office of the Inspector General. Anyone who violates security regulations or makes unauthorized use of Federal computer systems is subject to criminal prosecution and/or disciplinary action.

UNAUTHORIZED ACCESS PROHIBITED BY LAW--TITLE 18, U.S. CODE SECTION 1030

Public Law 99-474 provides that anyone who accesses a Federal computer system with or without authorization, and by means of such conduct obtains, alters, damages, destroys, or discloses information, or prevents authorized use of information on the computer, shall be subject to fine or imprisonment, or both."

I Accept





Overview

Generic Landing Page

The NSTS Main Menu appears when you logon to NSTS. This page serves as the home base for the system user. All functions that you need to access are conveniently linked from this Main Menu.

You may have multiple Licenses with which to work. The NSTS is designed to allow you to quickly and easily switch between License Numbers. Using the License Number drop-down box, at the top of the window, simply select the desired License Number from a pre-assigned listing of License Numbers. The Menu items are updated to reflect the functions that can be performed with the selected License Number.

To change the License Number under which you want to perform functions, select the License Number in the **License Number** drop-down box, and then click **Continue**. The menu items in the lower portion of the window will be refreshed according to the rights and privileges associated with the selected License Number.







User Type

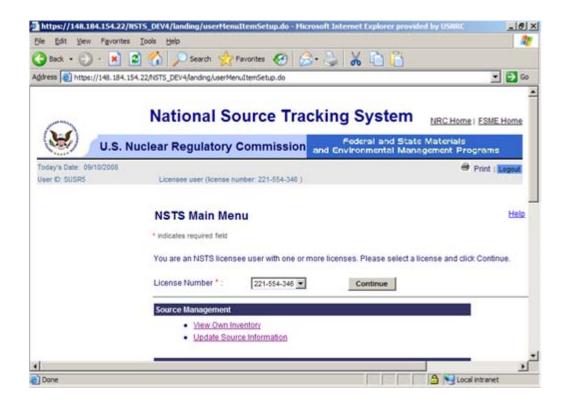
Licensee – Source User

A Licensee represents the company or person authorized to use radioactive materials under a license issued by the NRC or an Agreement State (A/S). A Source User is a Licensee that is authorized to use sources. These Licensees can manage sources and transfers.

- How to view the sources in your inventory by License Number see pages 15-16
- How to update source information, such as a source location see pages 24-26

Sources can be transferred and received from one Licensee to another. They can also be imported and exported. Transfers may also be edited or canceled in the event of an error.

- How to enter a source transfer see pages 17-20
- How to enter a source as received from a transfer see pages 21-23
- How to enter a source export see pages 27-29
- How to enter a source as received from an import see pages 30-33
- How to update transfer information, such as add a source to a shipment see pages 34-39
- How to cancel a transfer see page 38







User

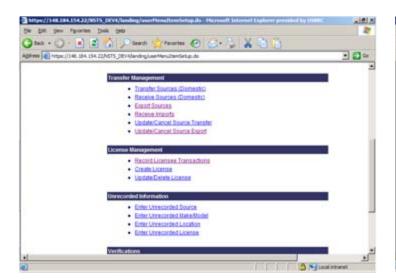
Licensee – Source User (cont.)

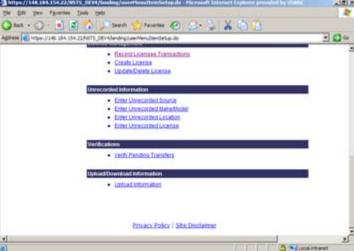
Quick entry functionality, also known as Enter Unrecorded Functionality, enables the user to quickly add a source, transfer, make, model, location, or licensee into the NSTS for immediate use. Entering an unrecorded make, model, location, or licensee populates the drop-down selection list with the entered value. Entering an unrecorded source adds the source record to the NSTS for use in a source function (update source information, transfer source, receive source, update/cancel source transfer).

- How to enter an unrecorded source see pages 44-45
- How to enter an unrecorded transfer when receiving a source see pages 48-51
- How to enter an unrecorded location see pages 40-41
- How to enter an unrecorded make or model see pages 42-43
- How to enter an unrecorded licensee see pages 46-47

Transfers which are entered as unrecorded are pending until they are verified by the sending licensee.

How to confirm or reject a pending shipment/transfer – see pages 52-54









Scenarios

Scenarios describe the behavior of the system from the viewpoint of the users that interact with the system. Graphical "stick" diagrams depict the interaction between the user and the functional process. e.g., "view inventory." The scenarios for the NSTS functions are outlined below and are organized by User Type. Each scenario also has page numbers indicating the location of each scenario for quick reference.

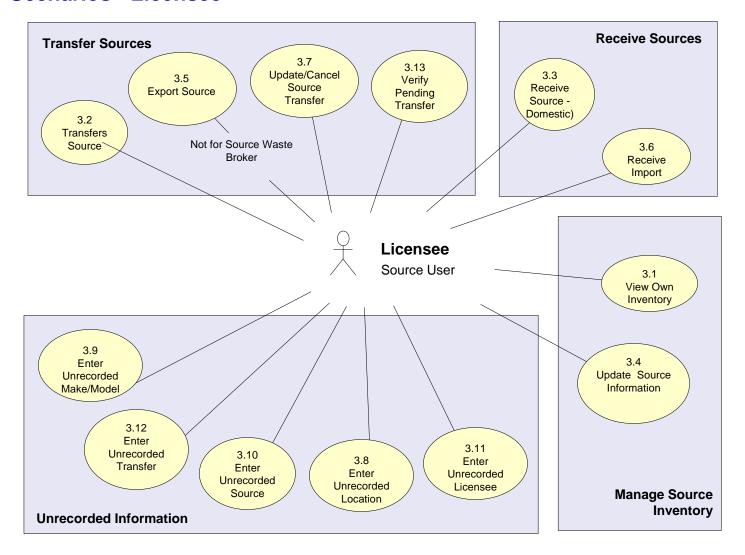
	Radiography Licensee Scenarios	Page
3.1	View Own Inventory	15
3.1	view Own inventory	10
3.2	Transfer Source	17
3.3	Receive Source – Domestic	21
3.4	Update Source Information	24
3.5	Export Source	27
3.6	Receive Import	30
3.7	Update/Cancel Source Transfer	34
3.8	Enter Unrecorded Location	40
3.9	Enter Unrecorded Make/Model	42
3.10	Enter Unrecorded Source	44
3.11	Enter Unrecorded Licensee	46
3.12	Enter Unrecorded Transfer	48
3.13	Verify Pending Transfer	52







Scenarios - Licensee







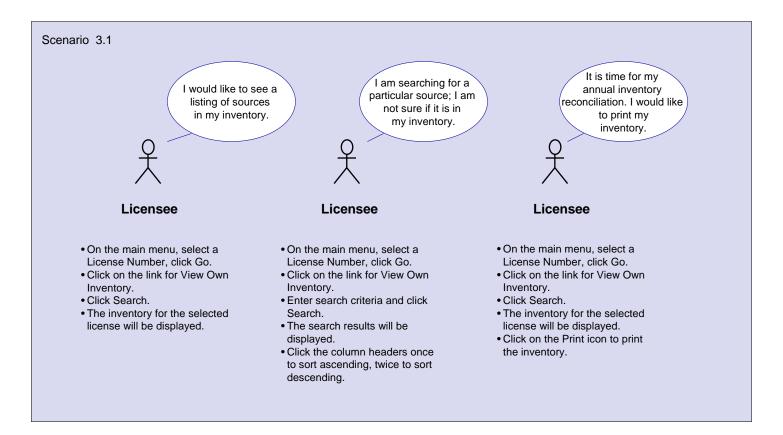
Scenario 3.1

View Own Inventory

The View Own Inventory function in NSTS allows the Licensee to see all of the sources currently in their inventory, based on the License Number. Sources that are in transit, for example sources that have been transferred to another Licensee, but have not yet been received by the receiving Licensee, will be part of the Licensee's inventory. These sources will remain part of the Licensee's inventory until they are entered as received in the NSTS by the receiving Licensee.

In addition to viewing all of the sources in the Licensee's inventory, the source listing can be filtered by using search criteria. The user can locate a particular source very quickly and easily by entering multiple data elements for searching. For example, selecting the Make, Model, and entering a Serial Number will return one source in the search results.

On the search results listing, the columns can be sorted for additional convenience. Click on the column heading once to sort ascending and twice to sort descending.





Scenario 3.1

View Own Inventory

To View Own Inventory:

- Click View Own Inventory.
 (see figure 3.1)
- 2. In the View Own Inventory window, enter your search criteria in the fields. (see figure 3.2)
- 3. Click **Search**. To see all inventory, leave search criteria fields blank, then click Search. The search results appear below the search criteria.

 (see figure 3.3).

 To close the window and return to the main menu, click **Back to Menu**.

To Sort Inventory:

 Click column headings once to sort ascending. Click column headings twice to sort descending.

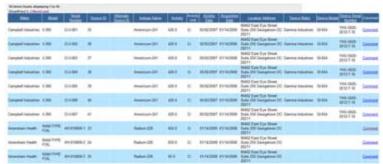
Figure 3.1



Figure 3.2



Figure 3.3









Scenario 3.2

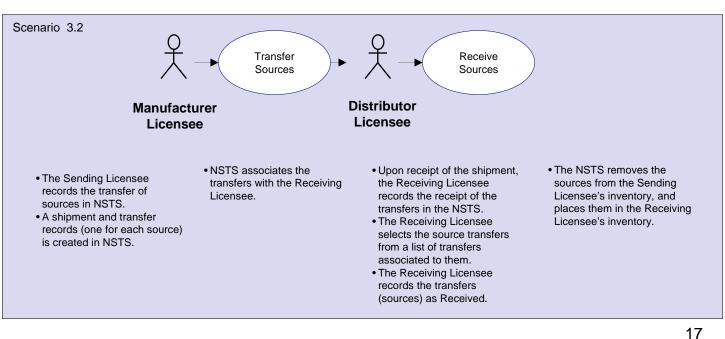
Transfer Sources

Transfer refers to the change of possession of NSTS-trackable Source material from one Licensee to another. The transfer of sources must be recorded in the NSTS by the next business day. A shipment can include one or more transfers.

The transfer and receipt of sources between Licensees results in inventory adjustments. Inventory adjustment occur when the transaction is completed by both parties. For example, a Licensee ships three transfers (sources) to another Licensee. The Sending Licensee records the transfer in the NSTS. The Receiving Licensee records the Receipt of the transfers in the NSTS. Once the Receiving Licensee accepts the transfers as Received; the sources are removed from the Sending Licensee's inventory and placed in the Receiving Licensee's inventory. Until the Receiving Licensee records the receipt of the sources in the NSTS, the Sending Licensee is responsible for the sources.

An example scenario for entering a source transfer follows:

- A Manufacturer Licensee sends a source transfer to a Distributor Licensee.
- The Manufacturer Licensee records the transfer of the sources in the NSTS using the Transfer Sources (Domestic) function. Transfer records are created for the sources, and a shipment record is created.
- The Distributor Licensee receives the shipment.
- The Distributor Licensee records in the NSTS the receipt of the transfers in NSTS using the Receive Sources (Domestic) function.
- When the Receive Sources transaction is complete, the sources are removed from the Manufacture Licensee's inventory and placed in the Distributor Licensee's inventory.







Scenario 3.2 Transfer Sources (cont.)

To Record the Transfer of Sources to Another Licensee:

- From the NSTS Main Menu click <u>Transfer Sources (Domestic)</u>. The Search and Choose Sources for Transfer (Domestic) window appears. (see figure 3.20)
- Enter search criteria (optional):
 Make, Model, Serial Number, Source
 ID, Device Make, Device Model,
 Device Serial Number, Alternate
 Source ID, and Isotope Name,
 Operator, Activity, and Unit.
 (see figure 3.21)
- To include Sources Below Threshold, select the **Yes** check box.
- 4. Click **Search**. To see all sources available for transfer, leave search criteria fields blank, then click Search.
- 5, To select the source(s) for transfer, click the **Select** checkbox.
- 6. Click **Continue**. <u>Note:</u> If the Licensee cannot find the sources to be transferred, the Licensee must first enter the sources by clicking **Enter Unrecorded Source**.

Figure 3.20

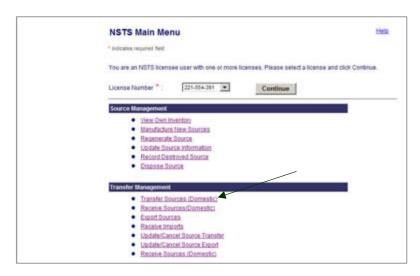


Figure 3.21







Scenario 3.2

Transfer Sources (cont.)

- 7. In the Search and Choose Receiving Licensee window, enter search criteria (optional): Licensing Agency, License Number, Docket Number, Licensee Name, and Address City and State. (see figure 3.22)
- 8. Click **Search**. To see all licenses available for transfer, leave search criteria fields blank, then click Search.
- 9, To select the Receiving Licensee, click the **Select** radio button.
- To view the license Street Address, Mailing Address, Company Phone Number, and Company Fax Number, click the <u>Additional Information</u> link for the license.
- 11. Click Continue.
- 12. The Enter Transfer Information (Domestic) window appears. The sources to transfer are listed at the top of the page. The Receiving Licensee information is listed below. (see figure 3.23)

Note: If more sources need to be added to the transfer, click on the Add Sources button. The Search and Choose Sources for Transfer window will be displayed. When the sources are selected, the system will return the user to this window, with the newly added sources included in the Sources for Transfer listing.

Figure 3.22

Search Criteria:			s victorit C per poper el tra stat.	make in any of the basis of
	Licensing Agencyi Licensee Bante: License Bantler: Docket Bumber:	Prese sentil Licensing Agency First choose Licensing Agency First choose Licensing Agency	•	
	License Category: Address:	Select License Category (*) Citys	State: Select State W	

Figure 3.23







Scenario 3.2

Transfer Sources (cont.)

- In the Enter Transfer Information (Domestic) window, select a location address from the Location Address drop-down list (optional).
- If the Ship-to-Address is the same as the selected Location Address, click the Yes check-box to populate it.
- Enter Ship-to-Address information: Address Line 1, Line 2 (optional), City, State, and Zip.
- Enter the Sending Date (the date the Sources are shipped); defaults to the current date.
- 17. Select a Carrier (optional).
- Enter the Tracking Number (optional), Estimated Arrival Date, Alternate Shipment ID (optional), and Manifest Number (optional).
- 19. Enter a Comment (optional).
- 20. Click Save.
- 21. When the confirmation window appears, click **Back to Menu** to return to the Main Menu.





Scenario 3.3

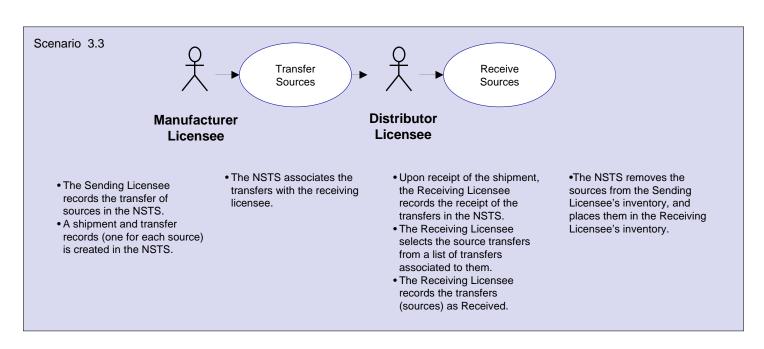
Receive Sources (Domestic)

A Licensee must record the receipt of sources in the NSTS if the material is an NSTS-trackable source.

The Receiving Licensee has three options when receiving sources in the NSTS. The source transfer can be accepted by selecting "Received," rejected by selecting "Not Received," or entered as "Unknown." Unknown is used when the Receiving Licensee is unable to determine at the time if they received the source or not. For example, if the Licensee cannot find the serial number on the source to verify whether or not it is received. They may need to contact the Sending Licensee to find out where the serial number is located on the source.

An example scenario for receiving a source transfer follows:

- A Manufacturer Licensee sends a source transfer to a Distributor Licensee.
- The Manufacturer Licensee records the transfer of the sources in the NSTS, using the Transfer Sources (Domestic) function. Transfer records are created for the sources, and a shipment record is created.
- The Distributor Licensee receives the shipment.
- The Distributor Licensee records in the NSTS the receipt of the transfers in the NSTS using the Receive Sources (Domestic) function, selecting the source transfers as "Received.
- When the Receive Sources transaction is complete, the sources are removed from the Manufacture Licensee's inventory, and placed in the Distributor Licensee's inventory.







Scenario 3.3

Receive Sources (Domestic) (cont.)

To Receive a Shipment of Sources:

- From the In the NSTS Main Menu click Receive Sources (Domestic). (see figure 3.37)
- The View and Choose Pending Shipment/Transfers window appears, with the shipments/transfers associated with the Licensee displayed.
- Select a shipment to receive by clicking the **Select** radio button. (see figure 3.38)
- 4. Click **Continue**.

Figure 3.37



Figure 3.38







Scenario 3.3

Receive Sources (Domestic) (cont.)

- 6. In the Enter Receipt
 Shipment/Transfers Information
 (Domestic) window, verify the transfer information for the shipment.
 (see figure 3.39)
- 7. Choose a Location Address from the Location Address drop-down list.
- In the Transfer Status drop-down list, select a status for each source in the shipment: Received, Not Received, or Unknown. (see figure 3.40)
- 9. Click Save.
- When the confirmation window appears, click **Back to Menu** to return to the Main Menu.

Note: You cannot change the status of a Pending transfer. The transfer status remains Pending until the Sending Licensee verifies the Pending transfer through the Verify Pending Transfer function.

If the transfer status is Received, the system removes the source from the Sending Licensee's inventory and adds the source to the Receiving Licensee's inventory. The source's current Alternate Source ID is carried to the Receiving Licensee's inventory record.

If all items in a shipment are received, the system will set the shipment status to Received.

Figure 3.39



Figure 3.40







Scenario 3.4

Update Source Information

The NSTS provides the ability for Licensees to update source information once the sources are loaded in the database. There may be times that the Licensee needs to update the location of a source, note that a source is in long term storage, or update the device information, for example, for a particular source. Using the Update Source Information function provides a quick and easy way for the Licensee to make necessary updates.

An example scenario for update source information follows:

- A Distributor Licensee is moving ten crates of sources to the west warehouse at their facility for long term storage.
- The Licensee clicks on the link for Update Source Information.
- On the data entry screen for each source record, the Licensee selects the new location address (west warehouse), and indicates the source is in Long-Term Storage.
- When the entry is complete, the Licensee saves the record.

Scenario 3.4



Distributor Licensee

- The Distributor clicks on the Update Source Information link
- A search screen is displayed for the Licensee to locate the source record.
- The Licensee enters search criteria and selects the source to update from the search results
- On the Update Source Information window, the Licensee selects the new location address for the source and indicates the source is in Long-Term Storage.
- The Licensee saves the record.
- The system updates the information in the database.





Scenario 3.4

Update Source Information (cont.)

To Update Source Information:

- From the NSTS Main Menu, click <u>Update Source Information</u>. The Search Sources for Update window appears. (see figure 3.47)
- Enter search criteria (optional) and then click Search. To view all sources available for update, leave search criteria field blank, then click Search.
- 3. Select the source by clicking the **Select** radio button. (see figure 3.48)
- 4. Click Update Source Info.

Figure 3.47



Figure 3.48







Scenario 3.4

Update Source Information (cont.)

- In the Update Source Information window, update any of the editable data elements as necessary. (see figure 3.49)
- If a source is being removed from a device, click Clear Device Info to remove the associated device information.
- 10. When the updates to the record are complete, click **Save**.
- When the confirmation window appears, click **Back to Menu** to return to the NSTS Main Menu. (see figure 3.50)

Note: Deleting a Source – To delete a source from the NSTS, contact the NSTS Help Desk.

Figure 3.49

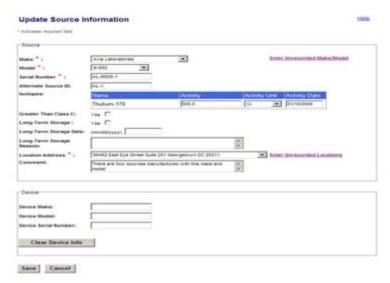
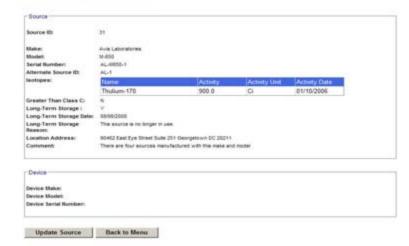


Figure 3.50

Update Source Confirmation







Scenario 3.5

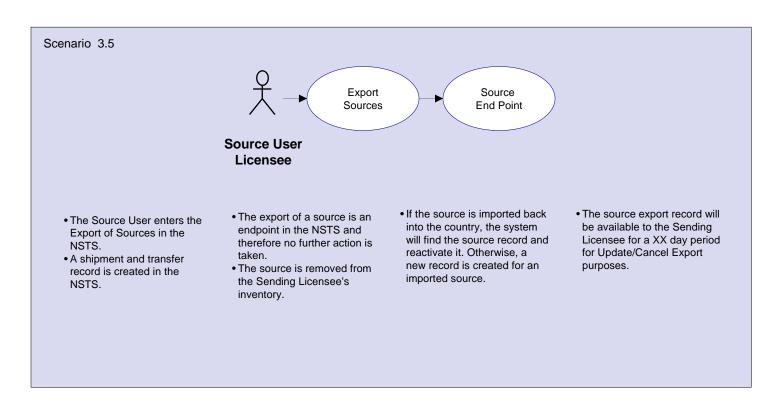
Export Sources

A Licensee with the proper Export License can export sources to foreign entities. Licensees may only export to foreign entities in approved countries, which are provided on a lookup selection listing. The Licensee must record in the NSTS when an NSTS-trackable source is exported to a foreign entity by the next business day.

Since the source is being exported, there is no Licensee receiving the source in the NSTS. Therefore, the export of an NSTS-trackable source represents a reversible endpoint in the source's life cycle. Reversible meaning that the source may be returned to the US in the form of an import and then the export endpoint would be reversed.

An example scenario for entering a source export follows:

- A Source User Licensee sends an Export of sources to a company in the United Kingdom (UK).
- The Licensee records the Export in the NSTS using the Export Sources (Foreign) function.
- The NSTS generates an Export and Shipment record.
- The NSTS removes the source from the Source User Licensee's Inventory.







Scenario 3.5

Export Sources (cont.)

To record the Export of a Source to a Foreign Entity:

- From the In the NSTS Main Menu click <u>Export Sources</u>. The Search and Choose Sources for Export window appears (see figure 3.24)
- Select search criteria (optional):
 Make, Model, and Isotope Operator,
 Activity, Activity Unit, Serial Number,
 Source ID, Device Make, Device
 Model, Device Serial Number, and/or
 Alternate Source ID. (see figure 3.25)
- 3. Click **Search**. To see all sources available for export, leave search criteria fields blank, then click Search.
- 4. Select the source(s) for export by clicking the **Select** check box, and then click **Export Sources**.

Figure 3.24

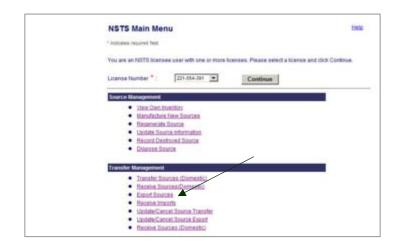


Figure 3.25







Scenario 3.5

Export Sources (cont.)

- 5. In the Enter Export Information window, enter the following: Export License Number, Foreign Company Information, Ship-to-Address, Shipping Date, Carrier (optional), Tracking Number (optional), Estimated Arrival Date, Alternate Shipment ID (optional), and Comments (optional). (see figure 3.26)
- 6. Click Save.
- 7. When the confirmation window appears, click **Back to Menu** to return to the Main Menu.

Figure 3.26







Scenario 3.6

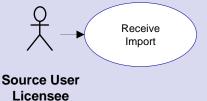
Receive Import

The Receive Import function is used when a Licensee receives NSTS-trackable source material from a foreign entity. The entry of the import must be entered into the NSTS within one business day of receipt. To record this receipt, the Licensee uses the Receive Import function. In most cases, the source material is being entered in the NSTS for the first time when it is received from an import. In the case where the source material has been in the NSTS then was exported and is now being imported back, the system will reactivate the existing source record.

An example scenario for receiving a source transfer follows:

- A Source User Licensee receives sources from a foreign supplier.
- The Source User clicks on the Receive Imports (Foreign) link to enter the receipt of the source.
- The Source User completes the data entry information and saves the record.
- The system checks if the source's Make, Model, and Serial Number are in the database with a transfer status of "Exported."
- The system finds the source, reactivates the record, and adds the source to the Licensee's inventory.





- The Source User receives an import shipment from a foreign manufacturer.
- The Licensee selects Receive Import (Foreign) from the main menu.
- The Licensee completes the data entry form and saves the record.
- The system checks for an existing source in the database with the same Make, Model, and Serial Number with an Exported status.
- If found, the system reactivates the source record, and adds the source to the Receiving Licensee's inventory.





Scenario 3.6

Receive Import (cont.)

To Receive a Shipment of Imported Sources:

- From the In the NSTS Main Menu, click <u>Receive Imports</u>. (see figure 3.41)
- 2. In the Enter Receipt Information (Foreign) window, enter the Import License Number, Foreign Company Name, Receipt Date, and Comments, if any. (see figure 3.42)
- Select the Foreign Country and the Receiving Licensee Location Address.
- 4. Enter the Number of Sources received in the import and click **Continue**.

Figure 3.41

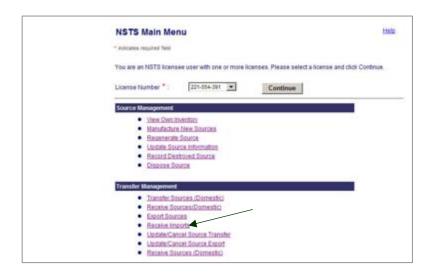


Figure 3.42







Scenario 3.6

Receive Import (cont.)

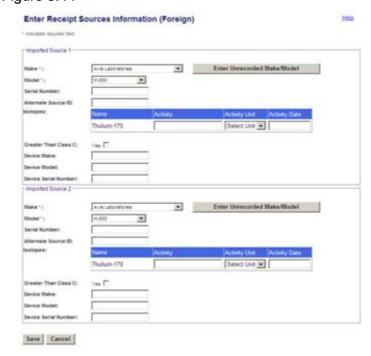
- 5. In the Enter Receipt Sources Information (Foreign) window, select the Make and Model for each received Source. If this is the first time that a particular Make and Model of a source is being received, the Make and Model may not be populated on the lookup listing. To add the Make and Model, click on the link for Enter Unrecorded Make/Model. (see pages 42-43 for more information). (see figure 3.43)
- 6. The Isotope table will display, populated with the isotopes associated with the selected Make and Model.
- 7. Enter the Isotope information, Activity, Activity Unit, and Activity Date.

 Note: The displayed isotopes are those isotopes already associated with the entered Make/Model. You do not have to enter values for each isotope row. If no value is entered on a row, that isotope is not saved with the Source. (see figure 3.44)
- 8. Enter the Source Serial Number. If the Source's activity is Greater Than class C, check the **GTCC** checkbox. If the GTCC checkbox is not checked, the system will set the GTCC to **NO**.

Figure 3.43

indicates required field.				
Imported Source 1				
Make ':	Peaks select Union	-	Enter Unrecorded Make/Model	1
Model 1:	First choose Water			
Serial Bumber:				
Alternate Source IO:				
leotopes:	better table will be displayed	after Heie and Hot	el era selectes.	
Greater Than Class C:	ties C			
Device Maker				
Device Model:				
Device Serial Number:				
Imported Source 2				
Make ':	Please select Value	-	Enter Unrecorded Make/Model	1
Model 1	First choose litate (*)			•
Serial Number:				
Alternate Source ID:	_			
teotopes:	Settope table in the displayed	after Naie and No.	er are selected.	
Greater Than Class C:	Van El			
Device Make:				
Device Model:				
Device Serial Number:				

Figure 3.44





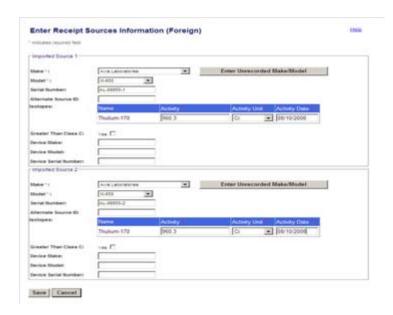


Scenario 3.6

Receive Import (cont.)

- 9. Optionally, enter an Alternate Source ID, Device Make, Device Model, and Device Serial Number. *Note:* If the Serial Number is not available, the system will generate a serial number. (see figure 3.45)
- 10. Click Save.
- Click Back to Menu on the Confirmation window to return to the Main Menu.

Figure 3.45







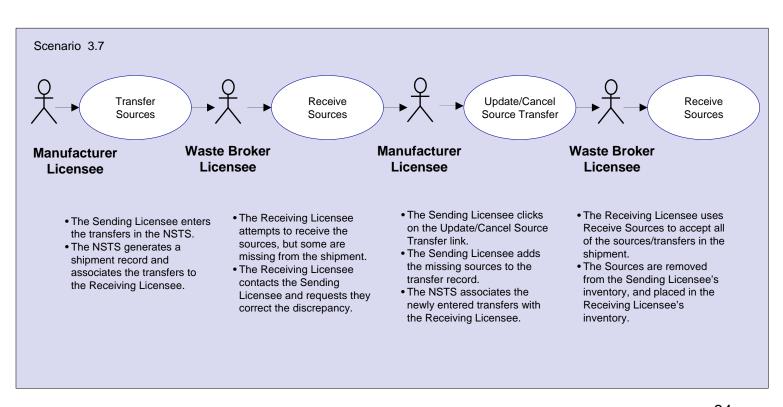
Scenario 3.7

Update/Cancel Source Transfer

Once a transfer record is completed in the NSTS, it is possible to make an update to it if there is erroneous information on the record. For example, if the Sending Licensee only added two out of four transfers, the missing two can be added. If the Sending Licensee entered the wrong Ship-to Address, the wrong Receiving Licensee, or if the whole transfer was entered in error, these can all be corrected through Update/Cancel Source Transfer.

An example scenario for entering a source export follows:

- A Manufacturer Licensee ships ten sources to a Waste Broker. They enter nine transfers in the NSTS.
- The Waste Broker receives ten sources in a shipment and attempts to record them as received in the NSTS through Receive Sources Domestic but only nine transfers are in the NSTS pending receipt!
- The Waste Broker contacts the Sending Licensee and requests that they resolve the problem.
- The Manufacture Licensee uses Update/Cancel Source Transfer and adds the missing source transfer
- The Waste Broker uses Receive Sources and now all ten sources are pending receipt. The Waste Broker records the receipt of the ten sources and they are added to his inventory.







Scenario 3.7

Update/Cancel Source Transfer (cont.)

To Update an Existing Transfer:

- From the In the NSTS Main Menu click <u>Update/Cancel Source Transfer</u>. (see figure 3.27)
- 2. The View and Choose Open
 Domestic Shipments window appears
 with a list of open shipments and
 transfers where the licensee is the
 Sending Licensee. Click the **Select**radio button to select a shipment to
 update. (see figure 3.28)
- 3. Click Update/Cancel Shipment.

Figure 3.27



Figure 3.28







Scenario 3.7

Update/Cancel Source Transfer (cont.)

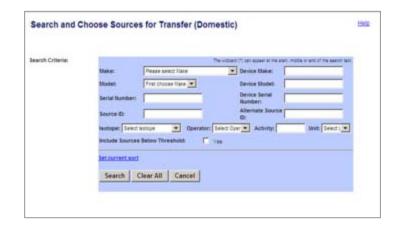
To Add Sources to the Transfer:

- In the Update/Cancel Domestic Shipment window, click Add Sources. The Search and Choose Sources for Transfer (Domestic) window appears. (see figure 3.29)
- 2. In the Search and Choose Sources for Transfer window, enter search criteria (optional): Make, Model, Isotope (Name, Operator, Activity, and Unit), Serial Number, Source ID, Device Make, Device Model, Device Serial Number, and/or Alternate ID. (see figure 3.30)
- Click Search. If you want to include Sources Below Threshold, select the Yes check box. The results will be displayed.
- Select the source(s) to add to the transfer by clicking the **Select** check box.
- Click Add Sources.
- The Update/Cancel Domestic Shipment window appears with the newly added source(s).

Figure 3.29



Figure 3.30







Scenario 3.7

Update/Cancel Source Transfer (cont.)

To Change the Receiving Licensee:

- In the Update/Cancel Domestic Shipment window, click the <u>Update</u> link. The Search and Choose Receiving Licensee window appears. (see figure 3.31)
- Enter search criteria (optional):
 Licensing Agency, Licensee Name,
 License Number, Docket Number,
 and/or Address City and State.
- Click Search. Results appear in the View and Choose Open Domestic Shipments window.
- 4. Select a new receiving licensee by clicking the **Select** radio button, and then click **Continue**.
- The Update/Cancel Domestic Shipment window appears with the updated Licensee in the Receiving Licensee box.

To Update Transfer Information:

 The fields on the Update/Cancel Domestic Shipment window can be edited. When the edits are complete, click Save.

Figure 3.31







Scenario 3.7

Update/Cancel Source Transfer (cont.)

To Remove a Source From a Shipment:

 In the Update/Cancel Domestic Shipment window, click the <u>Remove</u> link for a particular source. (see figure 3.32)

To Cancel an Entire Shipment:

- In the Update/Cancel Domestic Shipment window, click Cancel Entire Shipment. (see figure 3.33)
- 2. When the confirmation window appears, click **Back to Menu** to return to the NSTS Main Menu.

Figure 3.32



Figure 3.33







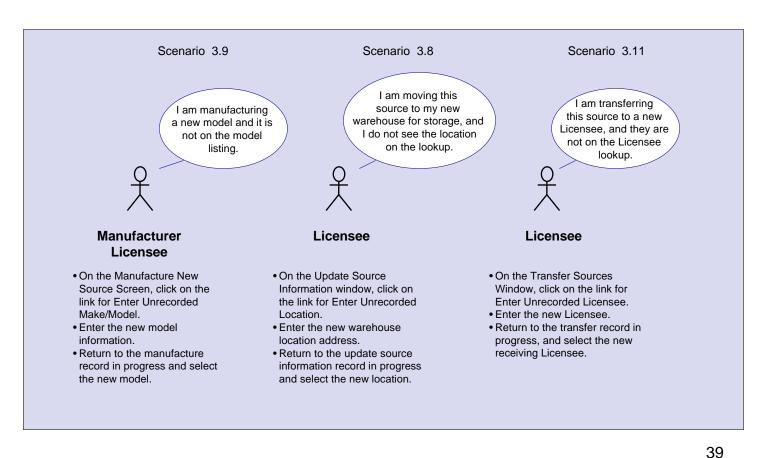
Scenario

Unrecorded Information Scenarios

Unrecorded Information is a way to quickly enter information into the NSTS that is needed to complete a data entry function.

Many of the data fields required for a record are lookup lists, which are implemented in the NSTS as drop-down selection boxes. The lookup ensures consistency in data entry and enables data entry to be fast and accurate. However, there are times when the value you need is not one of the selections on the lookup list. When the value is required, the system will not allow the record to be saved without it. In these cases, the user must enter the new value as an "unrecorded" value.

Next to every pre-populated lookup listing for NSTS source data, a link is available to "Enter An Unrecorded" value. Clicking on the link to enter unrecorded information presents a data entry screen for the user to enter the value that is missing from the lookup listing. Once the record is saved, the user returns to the lookup listing, and the value they just entered is now available for selection on the lookup list.







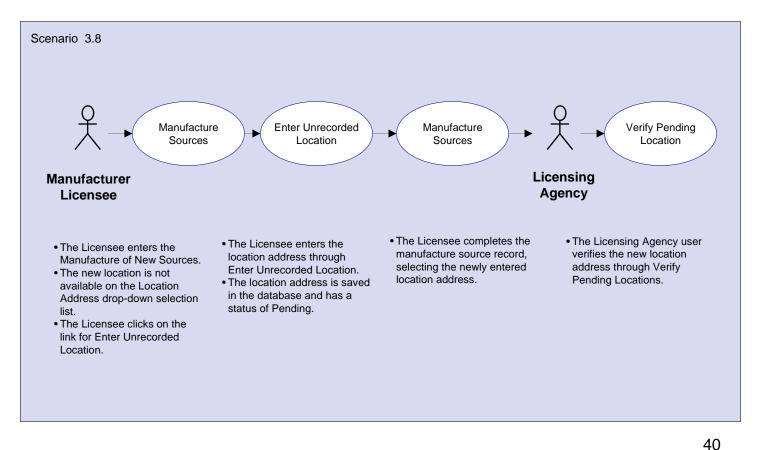
Scenario 3.8

Enter Unrecorded Location

Location Addresses for the Licensee are entered by selecting the address from a drop-down selection list. The listed Location Addresses are populated in the system when the License information is entered. If the Licensee has a new location that has not yet been entered in the system, the new location will not be available on the Location Address lookup listing. If a Licensee is sending source material to this new Location Address, they will have to enter the new address using the Enter Unrecorded Location function. Once the new address record is entered, it will be available for the Licensee to select in the Location Address drop-down selection listing.

An example scenario to enter an unrecorded location follows:

- A Manufacturer Licensee is entering a record for newly manufactured sources. The location for the source material is the newly acquired warehouse on 10th Street.
- The Licensee clicks on the link for Enter Unrecorded Location and enters the location into the system. The new location address has a status of "pending."
- The Licensee returns to the manufacture new source record and selects the new location address from the drop-down listing.
- An Agency Staff user will validate the entered location through Verify Pending Locations.







Scenario 3.8

Enter Unrecorded Location (Licensee)

To Enter an Unrecorded Location as a Manufacturer Licensee:

- Click on the link for <u>Enter Unrecorded</u> <u>Location</u>. (see figure 3.13)
- The Enter An Unrecorded Location window will be displayed. Enter the location Address Line 1, Line 2 (optional), City, State, Zip, and Comments (optional). (see figure 3.14)
- Click Save. When the Confirmation window appears, click Back to Menu to return to the Main Menu.

Figure 3.13

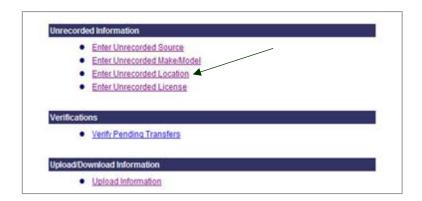


Figure 3.14







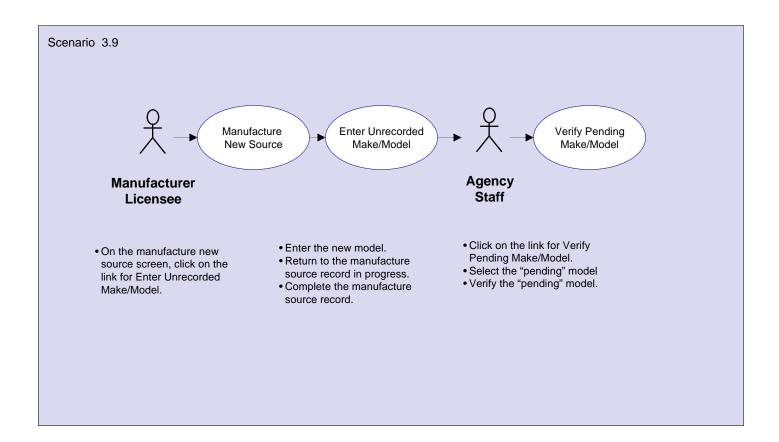
Scenario 3.9

Enter Unrecorded Make/Model

Enter Unrecorded Make/Model is used primarily by the Manufacturer Licensee to enter new makes and models that are being produced. It can also be used during data entry, when the make or model needed is not available on the Make or Model drop-down selection list. Next to each Make and Model drop-down selection box is a link to Enter an Unrecorded Make/Model. Once the new make/model is entered, it will be available on the Make or Model drop-down list for selection during data entry.

Example scenario 3.3 follows:

- A Manufacturer Licensee has a new model being produced.
- The Licensee enters the new model through Enter Unrecorded Make/Model.
- The new model is available for data entry for all Licensees.
- The new model has a status of "pending" in the system.
- The Agency staff verifies the pending model, removing the "pending" status.







Scenario 3.9

Enter Unrecorded Make/Model (cont.)

To Enter an Unrecorded Make/Model:

- From the NSTS Main Menu, click Enter Unrecorded Make/Model to display the Enter an Unrecorded Make/Model window. (see figure 3.4)
- 2. Enter the new Make and Model.
- 3. Select a Chemical Form and a Physical form (optional).
- To add isotopes, enter the Number of Isotopes in the Number of Isotopes box .
- 5. Enter a Comment (optional).
- 6. Click Continue.
- 7. The Enter Isotope Information window is displayed, with the Number of Isotopes entered previously enabled for the entry (see figure 3.5).
- 8. Select the Isotope Name and Activity Unit. Enter the Maximum Activity. Click Save.
- The Enter an Unrecorded Make/Model Review window will be displayed. Review the information and click Save.
- When the confirmation window appears, click **Back to Menu** to return to the Main Menu.

Figure 3.4

Figure 3.5







Scenario 3.10

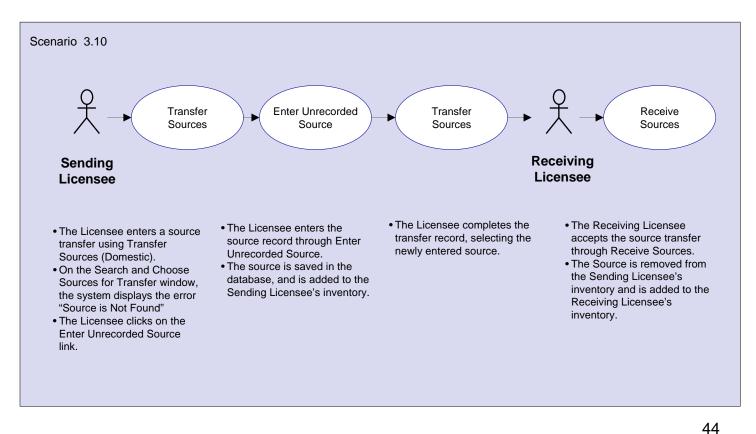
Enter Unrecorded Source

An unrecorded source refers to a source that was never entered into the NSTS, but is in the physical possession of a Licensee. The Enter Unrecorded Source function is used when the source the Licensee is searching for (e.g., for transfer, regeneration, etc.) is not found in the system.

The user can access Enter Unrecorded Source from the Main Menu. In addition, the link for Enter Unrecorded Source is available throughout the system, on the Search For Sources screens.

An example scenario follows:

- A Licensee is entering a source transfer.
- On the Search and Choose Sources for Transfer, an error message is displayed that the source is not in the NSTS.
- The Licensee clicks the link for Enter Unrecorded Source.
- The Licensee enters the source information and saves the record. The source is added to the Licensee's inventory.
- The Licensee returns to the Transfer record already in progress and selects the newly entered source record for transfer.







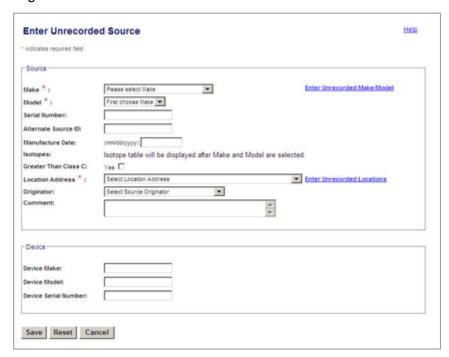
Scenario 3.10

Enter Unrecorded Source (cont.)

To Enter an Unrecorded Source:

- From the NSTS Main Menu, click Enter Unrecorded Source. The Enter Unrecorded Source window appears. (see figure 3.12)
- 2. Select a Make and a Model from the drop-down selection lists. The Isotope table will display, populated with the Isotopes associated with the selected Make and Model. If the Make or Model of the Source is not available in the drop-down list, click the link for Enter Unrecorded Make/Model to enter it.
- 3. Enter the Isotope Activity, Activity Unit, and Activity Date. The displayed isotopes are those that are already associated with the entered Make/Model. You do not have to enter values for each isotope row. If no value is entered on a row, that isotope is not saved with the source.
- 4. Enter the source Serial Number designated by the Manufacturer.

Figure 3.12



- Select a Location Address from the dropdown list, which is populated with all locations on file for the Licensee. If the list does not contain the appropriate location, click on the <u>Enter Unrecorded Location</u> link to enter it.
- 6. Enter a Comment and Device Information (optional).
- 7. Click Save.
- 8. On the Confirmation window, click **Back to Menu** to return to the Main Menu.





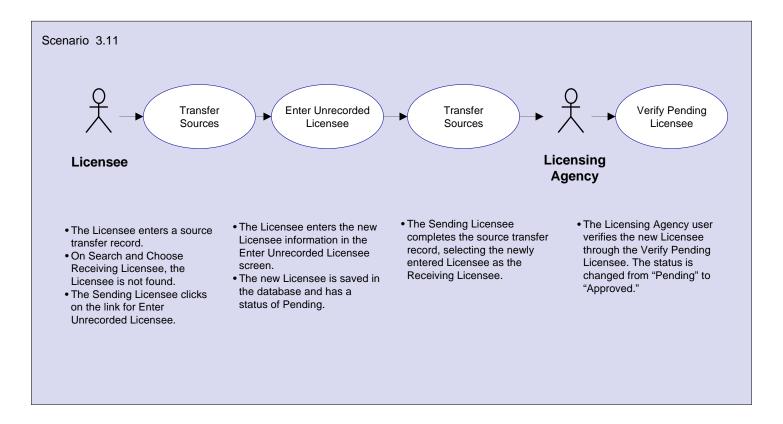
Scenario 3.11

Enter Unrecorded Licensee

Enter Unrecorded Licensee is used to enter a Licensee in the NSTS, which has not been previously entered, for use in a data entry function. For example, when a Licensee is sending a Transfer to another Licensee, and the Receiving Licensee is not available on the Licensee lookup listing, the Licensee must be entered in the system using Enter Unrecorded Licensee. Once the Licensee is entered in the system, it will be available on the Licensee lookup listing.

An example scenario to enter an unrecorded licensee follows:

- A Licensee is entering a Source Transfer and in searching for the receiving Licensee, an error message is displayed that the Licensee does not exist in the NSTS.
- The Sending Licensee clicks on the link to Enter an Unrecorded Licensee.
- The Sending Licensee completes the entry for the unrecorded Licensee, and returns to the transfer record already in progress. The newly entered Licensee is selected as the Receiving Licensee, and the transfer record is completed. The newly entered Licensee has a status of "Pending."
- The Licensing Agency will Verify the Pending Licensee, changing the status to "Approved."







Scenario 3.11

Enter Unrecorded Licensee

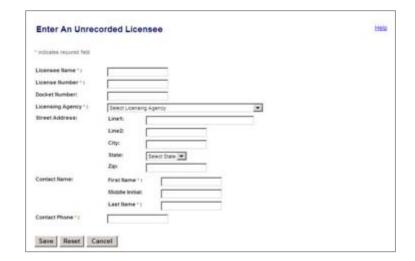
To Enter an Unrecorded Licensee:

- From the NSTS Main Menu, click <u>Enter Unrecorded License</u>. The Enter An Unrecorded Licensee window appears. (see figure 3.18)
- 2. Enter the Licensee's Name and License Number. (see figure 3.19)
- 3. Select the Licensing Agency.
- 4. Enter address information: Address Line 1, Line 2 (optional), City, State, and Zip.
- 5. Enter the contact's First Name, Middle Name (optional), Last Name, Title, and Phone Number.
- 6. Click Save.
- 7. When the confirmation window appears, click **Back to Menu** to return to the Main Menu.

Figure 3.18



Figure 3.19







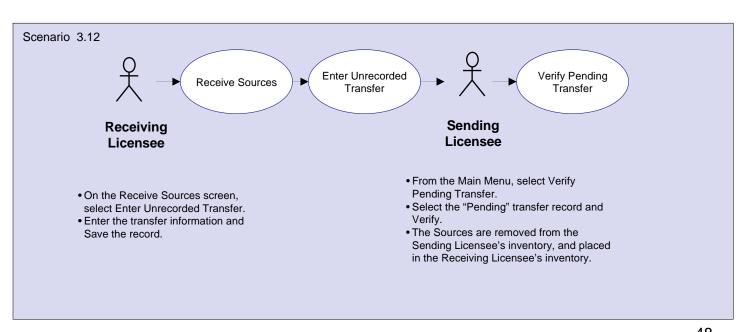
Scenario 3.12

Enter Unrecorded Transfer

The Enter Unrecorded Transfer functionality is a quick and easy way to enter transfer information that does not exist in the NSTS. When a Licensee receives a transfer, the transfer is entered as received through the Receive Sources function. The Receive Sources window presents a list of transfers that have been sent to the Receiving Licensee, and the Receiving Licensee selects the transfer for receipt from this listing. However, if the Sending Licensee did not enter the transfer in the NSTS, the record will not be on the Receiving Licensee's listing of transfers. Therefore, the Receiving Licensee needs to enter an Unrecorded Transfer to enter the transfer record, essentially, on behalf of the Sending Licensee. Once the Unrecorded Transfer is entered, the Sending Licensee needs to go into the NSTS and Verify the Pending Transfer. Once the verification is complete, the sources in the transfer are recorded in the Receiving Licensee's inventory.

An example scenario follows:

- A Licensee receives a shipment of sources
- The Licensee selects Receive Sources from the NSTS Main Menu
- The system presents a listing of Shipments/Transfers, where the Licensee is the "Receiving Licensee"
- The Licensee clicks the link for Enter Unrecorded Transfer
- The Licensee enters the Transfer Information and saves the record
- The Sending Licensee selects Verify Pending Transfer from the NSTS Main Menu
- The Sending Licensee Accepts the Pending Transfer Record
- The Sources are added to the Receiving Licensee's Inventory







Scenario 3.12

Enter Unrecorded Transfer (cont.)

To Enter an Unrecorded Transfer:

- From the From the NSTS Main Menu, click Receive Sources (Domestic).
- 2. The View and Choose Open Shipments (Domestic) window appears. (see figure 3.6)
- If the shipment you would like to record as received is not on the Open Shipments listing, click on the Enter Unrecorded Shipment/Transfers button.
- The Search and Choose Sending Licensee window will be displayed. Enter Search Criteria and click Search.
- The results appear in the Licensee box. Select the Sending Licensee by clicking the **Select** radio button.

Click Continue.

6.

To view additional license information, such as the addresses and the phone number, click the Additional License Information link.

Note: If the Sending Licensee is not

the system, click **Enter Unrecorded License** to enter it.

7. On the Enter Unrecorded Shipment/Transfer window, enter the Ship-to Address and the Date Received. (see figure 3.7)

Figure 3.6



Figure 3.7







Scenario 3.12

Enter Unrecorded Transfer (cont.)

- 8. Enter the Number of Transfers (Sources) received and click **Continue**.
- 9. The transfer records will be displayed. (see figure 3.8)
- Select the Make and Model from the drop-down selection list. If the source is not in the system, click the Enter Unrecorded Source button to enter it.
- 11. Enter the Serial Number.
- Enter a Device Make, Device Model, and Device Serial Number (optional). Click Continue.
- 13. The Review Unrecorded Shipment/Transfers window will be displayed. Verify all entered information and click **Save**. (see figure 3.9)
- 14. The View and Choose Open Domestic Shipments window will be displayed. Click **OK** to return to the Main Menu.

Figure 3.8



Figure 3.9







Scenario 3.12

Enter Unrecorded Transfer (cont.)

- 14. The View and Choose Open Domestic Shipments window will be displayed Click **OK** to return to the Main Menu. (see figure 3.10).
- 15. Click the **Select** radio button for the entered shipment and click **Continue**.
- The Enter Receipt Shipment/Transfers Information (Domestic) window will be displayed. (see figure 3.11)
- 17. Enter a Receipt Date. This will default to the current date.
- 18. Select a Location Address from the Location Address drop-down listing. If the location is not available on the list, click on the link for **Enter Unrecorded Location** to enter it.
- 19. Click Save.
- The Receive Sources Confirmation window will be displayed. Click Back to Menu to return to the Main Menu.

Figure 3.10



Figure 3.11







Scenario 3.13

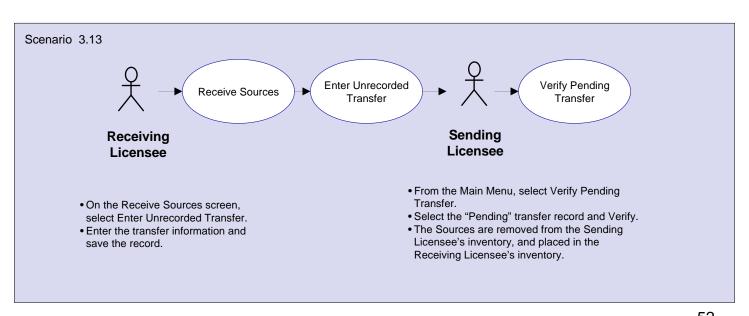
Verify Pending Transfer

Transfers which are entered in the NSTS through "Enter Unrecorded Transfer" must be verified by the Sending Licensee to complete the process.

When a licensee receives a transfer, they enter the transfer as received through the Receive Sources function. The Receive Sources window presents a list of transfers that have been sent to the Receiving Licensee, and the Receiving Licensee selects the transfer for receipt from this listing. However, if the Sending Licensee did not enter the transfer in the NSTS, the record will not be on the Receiving Licensee's listing of transfers. Therefore, the Receiving Licensee needs to enter an Unrecorded Transfer to enter the transfer record, essentially, on behalf of the Sending Licensee. Once the Unrecorded Transfer is entered, the Sending Licensee needs to go into the NSTS and Verify the Pending Transfer. Once the verification is complete, the sources in the transfer are recorded in the Receiving Licensee's inventory.

An example scenario follows:

- A Licensee receives a shipment of sources.
- The Licensee selects Receive Sources from the NSTS Main Menu.
- The system presents a listing of Shipments/Transfers, where the Licensee is the "Receiving Licensee."
- The Licensee enters the transfer information as an unrecorded transfer.
- The Sending Licensee selects Verify Pending Transfer from the NSTS Main Menu.
- The Sending Licensee Accepts the Pending Transfer Record.
- The Sources are added to the Receiving Licensee's inventory.







Scenario 3.13

Verify Pending Transfer (cont.)

To Verify a Pending Shipment/Transfer:

- From the In the NSTS Main Menu click Verify Pending Transfer.
- 2. The View and Choose Pending Shipment/Transfers window appears, with the pending shipments/transfers associated with the Licensee. (see figure 3.34)
- To select a pending shipment/transfer to confirm or reject, click the **Select** radio button.
- 4. Click Continue.

Figure 3.34







Scenario 3.13

Verify Pending Transfer (cont.)

- 5. In the Verify Pending
 Shipment/Transfers window, review
 the shipment/transfer information.
 (see figure 3.35)
- In the Verify Transfer drop-down list, select **Approve** to verify the transfer or **Rejected** to reject the transfer. (see figure 3.36)

Note: If the shipment/transfer is approved, the system sets the status to 'Received,' and the sources are added to the Receiving Licensee's inventory. If the shipment/transfer is rejected, the system sets the status to 'Investigate,' and the Licensing Agency becomes involved to resolve the issue.

- 7. To approve all the transfers in the shipment, select **Yes**.
- Click Save. To close the window without saving the changes, click Cancel.
- When the confirmation window appears, click **Back to Menu** to return to the Main Menu.

Figure 3.35



Figure 3.36







NSTS Resources

NSTS Website

http://www.nrc.gov/security/byproduct/nsts.html

NSTS Application

https://nsts.nrc-gateway.gov/nsts/welcome.do

NSTS Help Desk

1-877-671-6787 (NSTS)

NSTS Help Desk e-mail

nsts.help@nrc.gov

