Safeguards Management Software (SAMS)

Application Interface Instructions

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Revision Number: 3
Date: 7/12/2018

Official Use Only

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Revision History

Revision No.	Issue Date	Description of Changes
0	10/26/2009	Initial Release
1	6/21/2018	9.2 Update Release
2	7/6/2018	Manual Revision
3	7/12/2018	Manual Revision 2

Table of Contents

I. Purpose

This manual provides operational instructions concerning the Safeguards Management Software (SAMS) application program for submitting data to the Nuclear Material Management Safeguards System (NMMSS).

SAMS provides NMMSS data contributors a method of electronically storing and submitting transaction, inventory, and material balance data. SAMS provides identification of the data which conflicts with DOE and/or NRC rules and regulations so that it can be corrected prior to submittal to NMMSS. These verification errors are referred to as edit check errors.

SAMS is very similar to the NMMSS upgrade software application, used by the NMMSS Nuclear Materials Analysts to track all reported NMMSS data. Like the larger NMMSS, SAMS provides the ability to perform edit checks, generate various reports, hard copies of DOE/NRC Form 741, import and export transactions, material balance and inventory data. Since the functionality and look of SAMS is similar to NMMSS software currently being utilized at DOE-HQ, the analysts will be able to better assist in resolving problems encountered during its use.

A. Assumptions

This user's manual assumes that the user has a general level of proficiency in the use of a personal computer and a general knowledge about the function of NMMSS. The intent of this manual is to provide guidance in how to use the application being provided. Not to instruct the end user on the DOE/NRC NMMSS reporting requirements. NMMSS reporting requirements can be located at http://www.hss.energy.gov/nmmss.

B. Security Concerns

The user assumes all responsibilities for classifying and handling of data within the SAMS application and for the reports produced by this application. The initial SAMS database being delivered to the end use is considered to be **Unclassified - 'Official Use Only'**.

C. Acronyms

DOE	United States Department of Energy
NMMSS	Nuclear Material Management and Safeguards System
NRC	Nuclear Regulatory Commission
RIS	Reporting Identification Symbol
SAMS	Safeguards Management Software
SIMEX	Secure Information Management Exchange Network

II. Software Installation

The SAMS application can be installed as a single user standalone system on a PC or on a network under a client / server configuration. The following sections provide information critical to the installation and usage of the Safeguards Management Software (SAMS) product set, including hardware and software requirements. This information is based on version 9.2 of the SAMS application. The SAMS user should check for updated releases or patches for any changes to the installation instructions on subsequent releases.

A. Prerequisites

One of the main changes in SAMS 9 is the streamlining of the installation process. The previous manual process can still be used with SAMS, but the recommended method is for users to use the full SAMS 9 installer either with or without the SQL Express component (noSQL installation).
For manual installation a SQL Server must be installed prior to initiating the SAMS application installation process. The Administrator privilege is required to perform the SAMS Application installation. The full version of the SAMS installer has Microsoft SQL Express 2012 included with the package and does not need any additional components for its deployment. If you are manually installing SAMS or are using the noSQL version of the SAMS installer, then the following components need to be configured and deployed:

1. Microsoft .NET Framework 4 is required before installing SAMS, located under the _Redist directory of the application installation folder.

2. SQL Native Client 1.0 is required before installing SAMS, located under the _Redist directory on the install folder.

3. SQL Server must be running, either on a server or for standalone on the computer you are Installing SAMS on. SAMS will run on SQL Server 2008, SQL Server 2012, SQL Server 2016. SAMS also supports SQL Express and any version between 8 and 16 can be used with the SAMS database. A copy of SQL Express 2012 is included, located under the _Redist directory on the install folder.

B. Hardware / Software Information

This section provides basic information on the hardware and software requirements for running the SAMS application and its database.

1. Client Requirements

Table 1 provides the recommendations and requirements for operating the SAMS client product on the desktop.

Table 1: Desktop Requirements and Recommendations

Item	Requirements and Recommendations
Operating Systems	• Microsoft Windows Vista • Windows 7 • Windows 8, Windows 8.1 • Windows 10
Other Software / Drivers (Included with the Installer)	• Microsoft .NET 2.0 Framework (x86) • Microsoft .NET 4.0 Framework (x86 & x64) • Microsoft .NET 4.5.2 Framework (x86 & x64) • Microsoft Installer v2.0 & v3.0 • Microsoft SQL Connector 11
	Notes: Both the SAMS Full Distribution and the SAMS no SQL Distribution (Option 1 & 2 listed above) contain all of the requirements needed for SAMS and will verify that the system already has those requirements installed. If not, both installers will automatically install the needed files prior to installing SAMS.
Hardware	• Any Intel based CPU (both x86 & x64 architecture are allowed) • 2 GB or higher RAM; Recommended 4GB or greater; more memory generally improves performance. • A minimum of 1GB of available storage space is required. • Microsoft mouse or compatible pointing device • CD-ROM drive, flash drive, downloaded installer files.

2. Server Requirements

Table 2 provides the recommendations and requirements for operating the SAMS database product.

Table 2: Server Requirements and Recommendations

Item	Requirements and Recommendations
Operating Systems	• Microsoft Windows 7 or later • Microsoft Windows Server 2003 • Microsoft Windows Server 2010 • Microsoft Windows Server 2012
Database Server	• Microsoft SQL Server 2008 Express, Standard, or Enterprise Edition, Service Pack 2 or later or Microsoft SQL Server 2008 or Microsoft SQL Server 2012 or Microsoft SQL Server 2016
Other Software / Drivers	• Microsoft .NET 2.0 Framework (x86) • Microsoft .NET 4.0 Framework (x86 & x64) • Microsoft .NET 4.5.2 Framework (x86 & x64) • Microsoft Installer v2.0 & v3.0 • Microsoft SQL Connector 11
Hardware	• 1 GHz or higher CPU • 1 GB or higher RAM; more memory generally improves performance. • Microsoft mouse or compatible pointing device • CD-ROM drive, flash drive, downloaded installer files.

C. Installation Overview

Note: ANY PRIOR BETA RELEASE OF SAMS MUST BE UNINSTALLED PRIOR TO THIS INSTALLATION.

Note: If you already have SAMS 8.x installed in the same location you are installing SAMS 9.0 into it would be advisable that you either uninstall SAMS 8.x prior to installing this new version or manually rename the existing folder. If any of the existing SAMS 8.x files are open on your PC or if the installer has a permission schema that is lower than then what is needed to overwrite these files, then there is a possibility that the new version of SAMS 9.0 could fail to install correctly.

The latest release of SAMS is version 9.0.0.1 (as of 11/1/2017). To help accommodate the distribution of the software for a number of different configurations and environments.

There are three (3) types of SAMS installations available. Administrator privileges are required to properly install SAMS.

1. SAMS 9.0 Full Installation – This option includes all requirements needed to deploy a full version of SAMS either as a new installation or as an upgrade to an existing version of SAMS 8.x.x.x. This option also contains a new installation of Microsoft SQL Server 2012 (including both x86 and x64 depending on your system configuration). If SAMS has never been installed on your system, we recommend that you use this version of the SAMS installation.

2. SAMS 9.0 Installation without SQL Server – All required files except for the new version of Microsoft SQL Server 2012 are included in this installer. If you wish to use the previous SQL server used with SAMS 8.x.x.x (Microsoft SQL Server 2008) or wish to have the SAMS database located on a different server then this option would be used to either upgrade SAMS 8.x or create a new installation of SAMS 9.0. Please note that an accessible version of SQL must be available for the installation to deploy the new SAMS database. If the SQL server resides on a system that is remote, the user will also be required to provide SQL credentials to access the remote server.

3. SAMS 9.0 Manual Installation – If you do not wish to use the automatic installer for SAMS and would rather deploy the software manually, then this version of the SAMS installer would be required. Please note that this version only contains the

SAMS application files, SAMS database backup, and roaming profile configuration file.

SAMS and the installers used by SAMS are packaged to allow the software to function over a wide number of PC configurations.

D. Manual Standalone Installation

If you wish to deploy SAMS manually (without the SAMS installer) then the following steps will need to be followed for successful deployment of the software.

- Run the *setup.exe* from the SAMS installation files or copy the manual installation files to the installation directory you wish to deploy SAMS in.
- Before you run SAMS the database will need to installed and the SQL connector will need to be configured.
    - Please install the files located in the _Redist sub-folder of SAMS, the files are required for the program to operate correctly. The SQL database will also require certain parameters to be set and the scripts required to perform these can be located in the *C:\SAMS Application\Scripts* sub-folder.
    - The setup will require a SAMS 9 database to use:
        - Previous versions of the SAMS database cannot be used with SAMS 9. Please back up the existing SAMS 8 or older database prior to installing or upgrading to SAMS 9. A copy of the SAMS 9 SQL database can be found in the SAMS Application/Database sub-folder. Proceed with the restoration of this database for the manual installation of SAMS 9.
    - To migrate the previous SAMS data a migration script has been provided in the SAMS Application\Scripts sub-folder. This can be used to move the previous SAMS data into the new SAMS 9 SQL database. Please contact support if you require assistance with this process.
- If other users will be using SAMS on this system, grant those users access to the SAMS database by performing the following in a command prompt window:
    - Change the directory to the folder where the SAMS Application was installed. By default, the location is: *C:\SAMS Application*

- Change the directory to the Stored Procedures folder by entering:

  cd Stored Procedures

- Add the user by entering:

  SAMS_SetupUser "(local)" "SAMS" "*machine\userID*"

  where
  machine is the name of the system
  userID is the user's Windows login name

  For example,
  SAMS_SetupUser "(local)" "SAMS" "TEST\JohnDoe"

  Note:

  1) A log file named SAMS_AddUser.log is created each time the script is execute.

  2) execute this command for every user requiring access to the SAMS application.

- After the installation is completed, perform the following tasks:

  - add database users to the SAMS database and grant access to the ***SAMSUsers*** database role.
  - create a share on the root folder where all reports will be created and grant read / write access to all SAMS users.
  - create a share on the root folder where all XML import files and import log files will be saved and grant read / write access to all SAMS users.
  - execute the following SQL commands against the SAMS database.

    ```
    USE [SAMS]

    UPDATE GlobalParameters
    SET [Value] = '<shared report folder>\'
    WHERE KeyField = 'BatchReportPath';

    UPDATE GlobalParameters
    SET [Value] = '<root folder>\'
    WHERE KeyField = 'GeneratedReportPath';
    ```

```
UPDATE GlobalParameters
SET [Value] = '<shared XML folder>\'
WHERE KeyField = 'XMLImportPath';
```

Note: <*root folder*> is the root folder and <*shared folder*> is the shared folder defined above. Ensure that the folder names end with a back slash (\). For example: **C:\SAMSReports** and **\\abc\SAMSReports**.

- Perform a full database backup of the SAMS database.

E. Standard Installation of SAMS

One of the biggest enhancements of SAMS 9 versus previous releases is the packing of the installation files. In past versions multiple components and steps needed to be followed for installing or upgrading SAMS. Using SAMS 9 this process has been streamlined to include a single installation application that contains all required components needed for SAMS. This process is recommended for most users since it verifies that the correct account settings and components are included prior to initializing SAMS. Once you have downloaded or inserted the CD containing the SAMS installer, please launch the setup.exe file located in the SAMS installation directory. Please follow the steps shown below to complete the installation of SAMS 9:

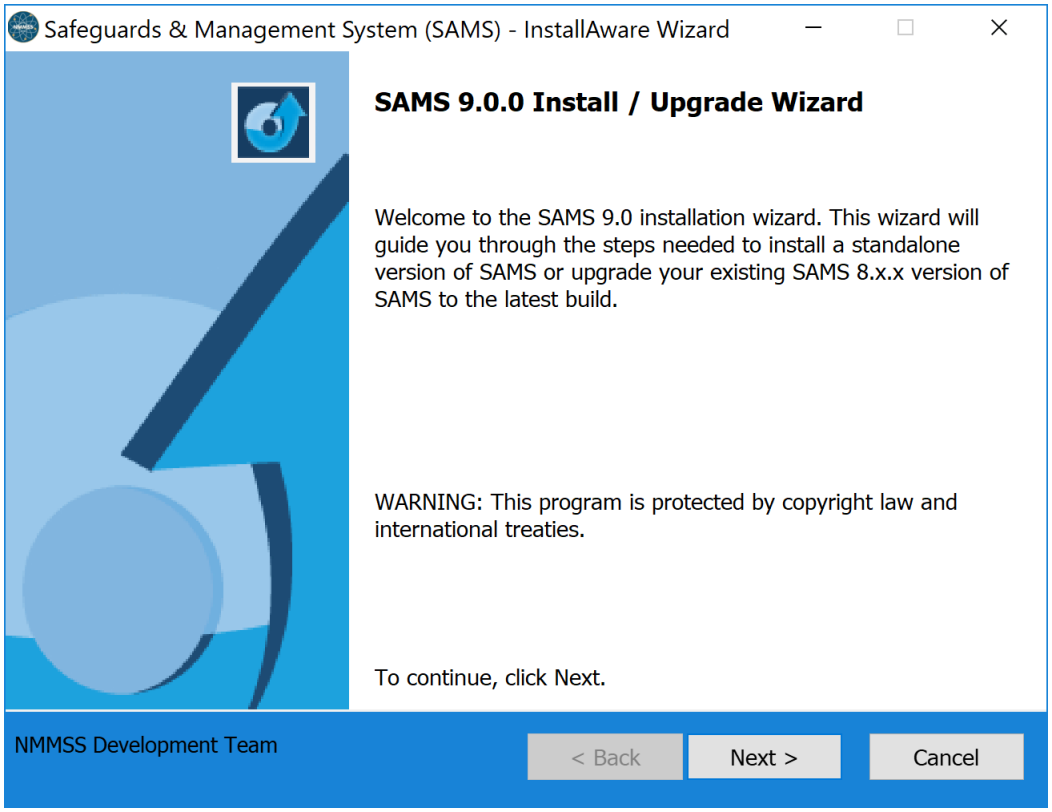


Figure 1

Note: If the system is missing any of the SAMS 9.0 system requirements the installer will automatically install those prior to beginning the SAMS 9.0 installation. Depending on which requirements are missing, the system may need to reboot several times.

Follow the installer instructions until the screen in Figure 1 is displayed. If the system reboots during the installation process, do not re-launch the installer. After reboot, the SAMS 9.0 installer will automatically resume the installation process without any user intervention.

Once all of the core requirements are installed, click the “Next” button to proceed to the next step of the installation.

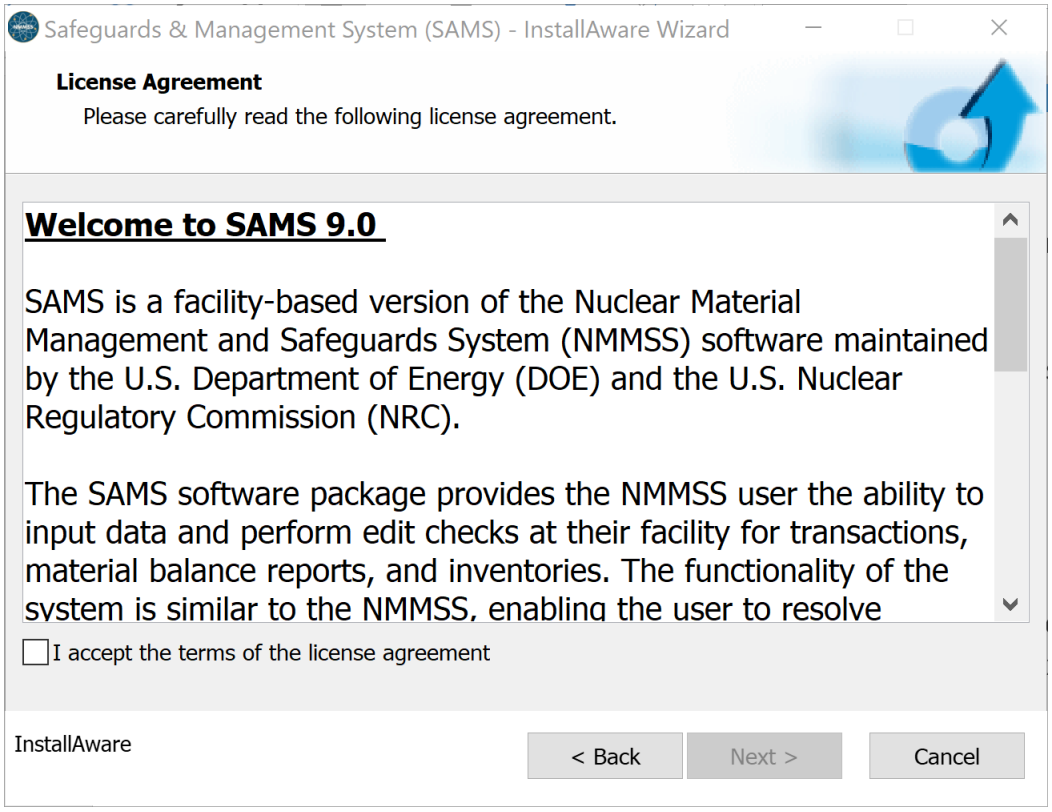


Figure 2.

Review the text provided in the License Agreement for SAMS as shown in Figure 2 above. To proceed, check the box marked “I accept the terms of the license agreement.” The “Next” button will be grayed out and disabled until the box is checked.

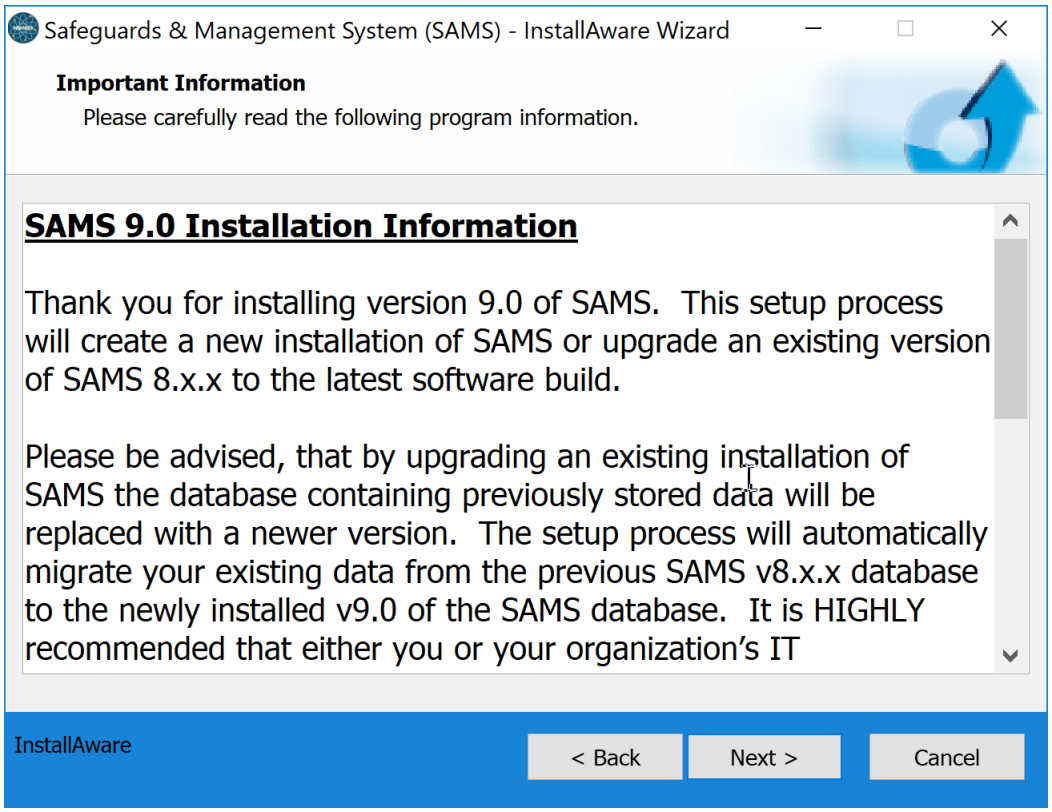


Figure 3.

It is advised that the information in the text box for Figure 3 be read and understood before proceeding. Note: Both the full installer of SAMS and the No SQL version of the installer allow for the upgrading of an older version of SAMS 8.x.x.x. This upgrade will back up the exiting SAMS 8.x database to "SAMS_v8" and automatically migrate any user data that may have already be entered into SAMS.

Due to the many different environments that exist where SAMS can be used, it is highly recommended that existing SAMS 8.x data is backed up manually prior to installing the new version of SAMS. All possible efforts to ensure a smooth transition of the user data has been made, but there is always a risk that data will not transfer correctly. For help with this process, contact your IT support team or the NMMSS support team.

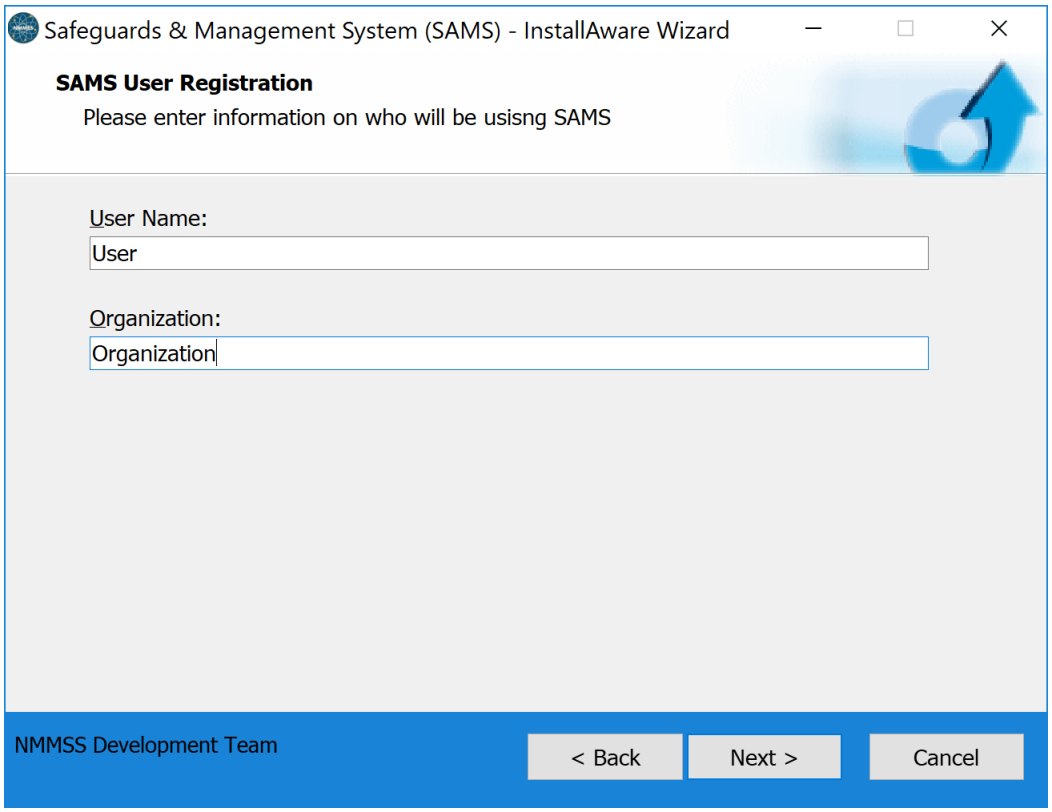


Figure 4.

SAMS User Registration

Required fields: User Name and Organization. By default, these fields will be populated with the user's Windows credentials. If those are not found, the fields will remain blank and the user will be required to provide the requested information before proceeding. If the "Next" button is disabled, fill in the missing field and the installer will continue. The installation will not be able to be completed if the fields are left blank. See Figure 4.

Destination Folder

The next step of the installation process requires the user to provide a location for where on the system to install the files for SAMS.

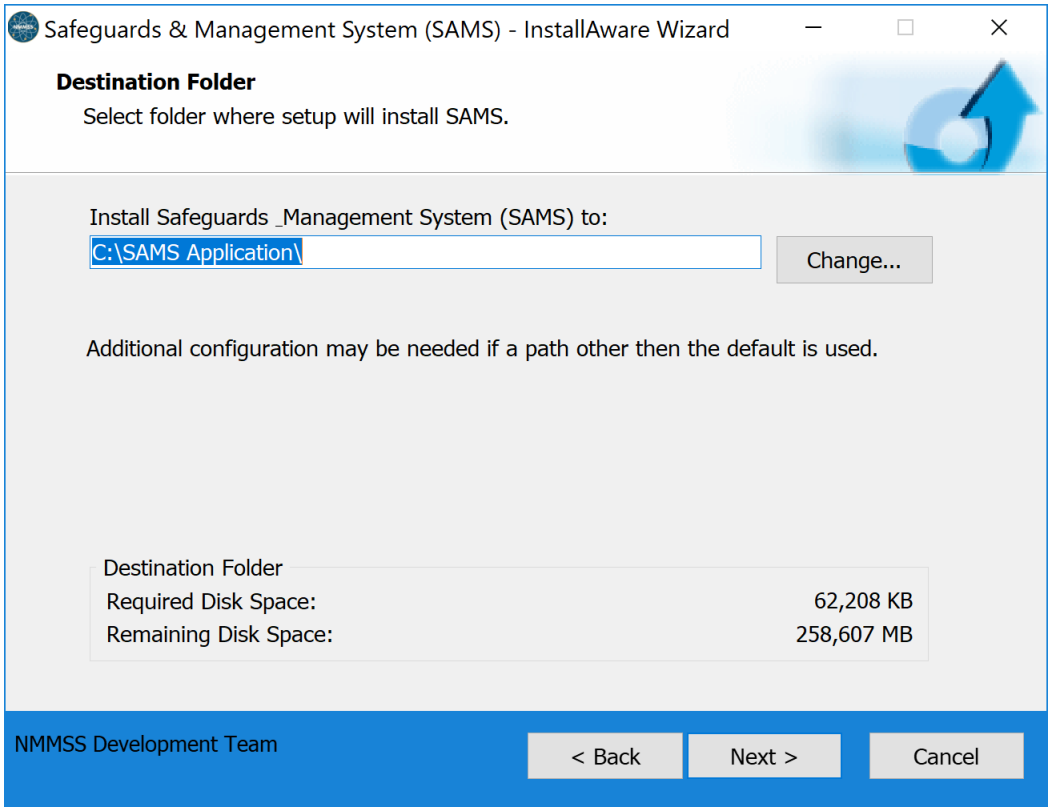


Figure 5.

SAMS uses the default path of \SAMS Application\ located on the C: drive of the computer the installer is being run on. We recommend that you keep this path but if you do need to deploy SAMS to a different location please either enter the path into the text field manually or click on the "Change…" button and use the file explorer to locate the drive and folder path you would like to use for your SAMS installation.

Note: If you already have SAMS 8.x installed in the same location you are installing SAMS 9.0 into it would be advisable that you either uninstall SAMS 8.x prior to installing this new version or manually rename the existing folder. If any of the existing SAMS 8.x files are open on your PC or if the installer has a permission schema that is lower than then what is needed to overwrite these files, then there is a possibility that the new version of SAMS 9.0 could fail to install correctly.

Once the desired installation path has been entered, please click the "Next" button to proceed with the installation process.

Select Program Folder

Once the location of the files has been set the installer will ask how the user would like to have SAMS added to the program list and which user accounts on the local system should have this added to their start group.

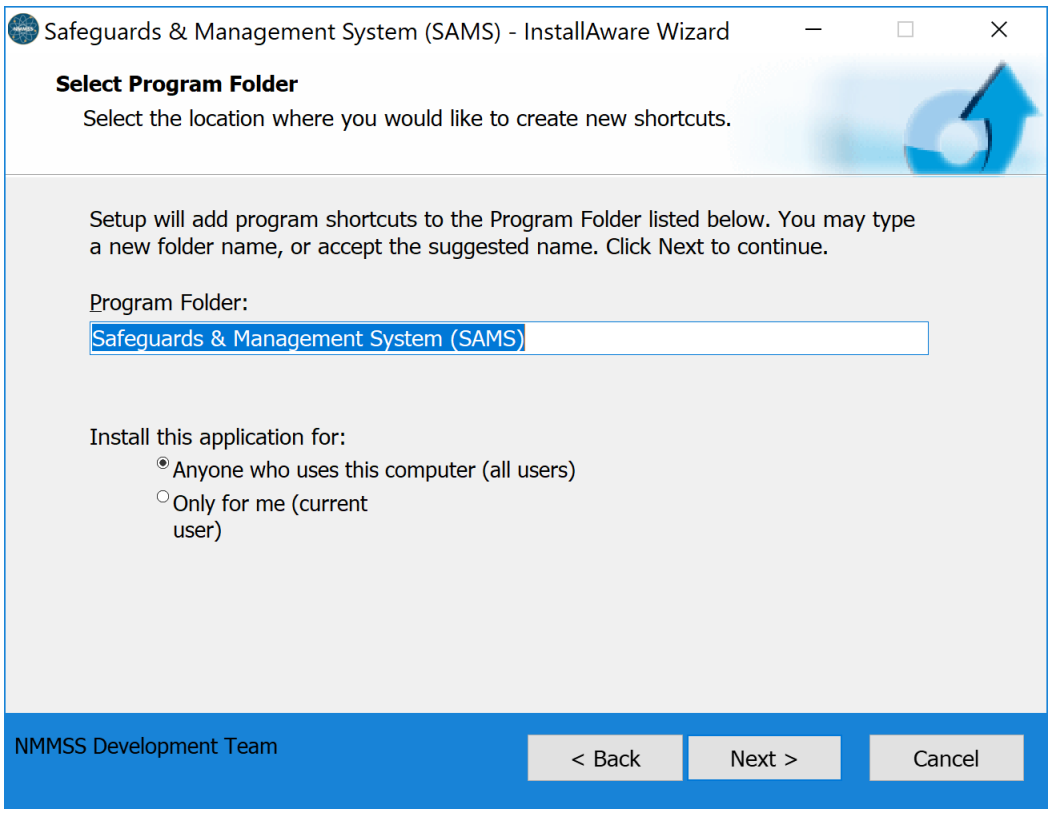


Figure 6.

You can see the default values that are provided in Figure 6 above. The Program Folder is located in your program or application list under your start menu. If you choose to install the application for "Anyone who uses this computer (all users)" then SAMS will be listed as a available application for all users of the PC. If you wish to be the only users who sees the program menu for SAMS, please select "Only for me (current user)".

Please note that this is only for the program listings in the start menu and not a restriction on who will be able to access SAMS. The application will be accessible to all users regardless of which option is selected but the start menu shortcut will only be shown for the specific user if that option is selected above.

For most users the default option is the best choice. Please click the "Next" button to continue with the SAMS deployment.

Existing SQL Servers Containing SAMS Scan

Since SAMS uses a SQL server deployment as the backend database, the next step needs to be configured correctly for SAMS to function. We have made all effort to automate this process and make it as simple to follow as possible. Please read the following section carefully to proceed.

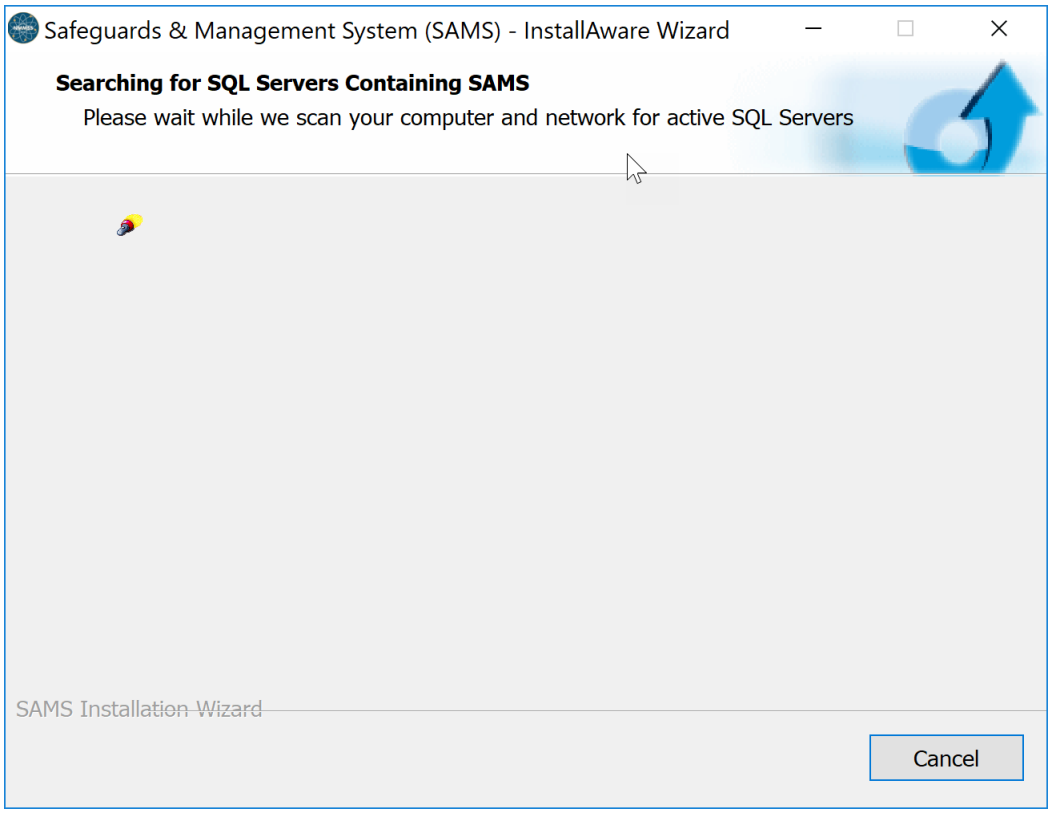


Figure 7.

The SAMS installer will automatically begin to search for any existing SQL servers. If you used the full installer of SAMS that included Microsoft SQL Server 2012 then this server will also be identified in the listing of available instances of SQL that can be used with SAMS.

The process will take between a few seconds up to a number of minuets depending on how large a network the PC is connected to. During this period the installer tried to look for any available instance of SQL to use with SAMS.

Note: If you have a local firewall installed you may get warning messages during the step asking for permission to allow SAMS access to the network. This is used to automatically identify accessible SQL servers to use with SAMS and should be allowed.

Once the SQL scan completes you will automatically move on to the screen shown in Figure 8 below.

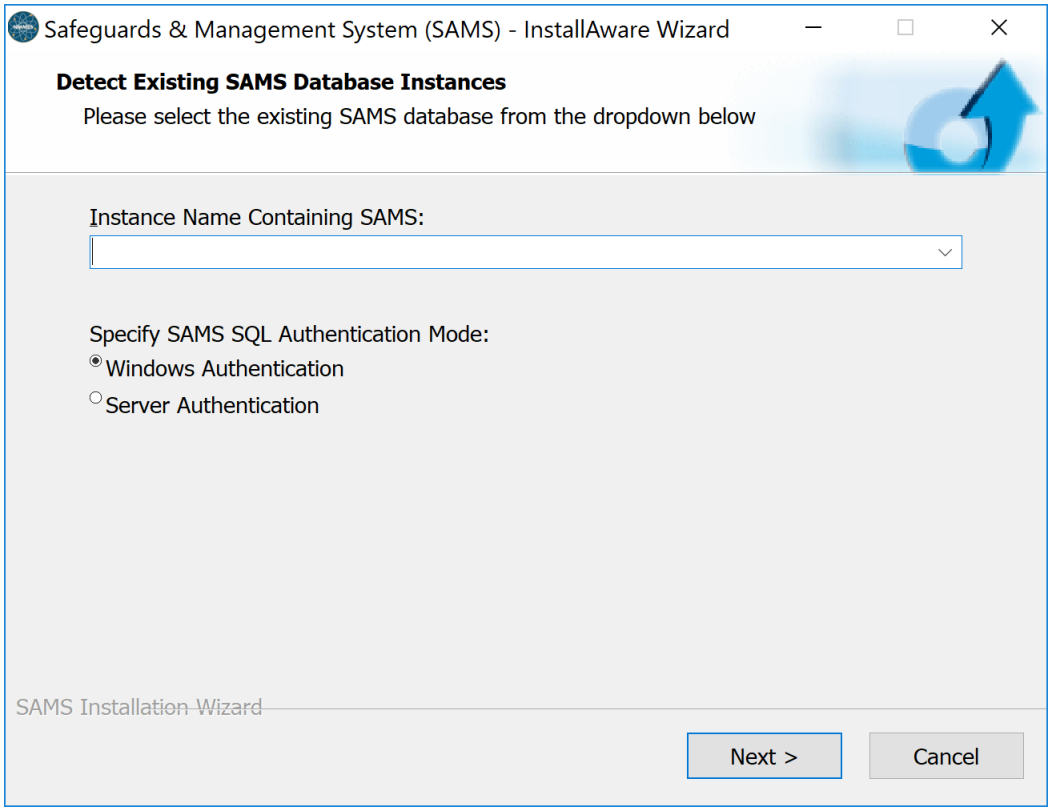


Figure 8.

The dropdown option for "Instance Name Containing SAMS:" will be populated will all found SQL servers that the PC could find during the scan. There are also two methods for connecting to the SQL server provided.

It is important to understand where the SAMS database will be located and how SAMS will be allowed to connect to the server. If the server resides on the same PC as the SAMS software then "Windows Authentication" should be used. If the SAMS database resides on the system other than the local PC then Server Authentication should be used. Since the remote SQL server requires authentication via a username and password as shown in Figure 9 below you will need to contact your database administrator and have them provide you with the correct credentials.

Note: If you are installing both SAMS and SQL on the same PC, select "Windows Authentication" and make sure the "Instance Name Containing SAMS" dropdown is cleared (select any text that may be shown in the dropdown and click the keyboard delete key). This defaults the installer and provides the simplest method for deploying SAMS onto the local PC.

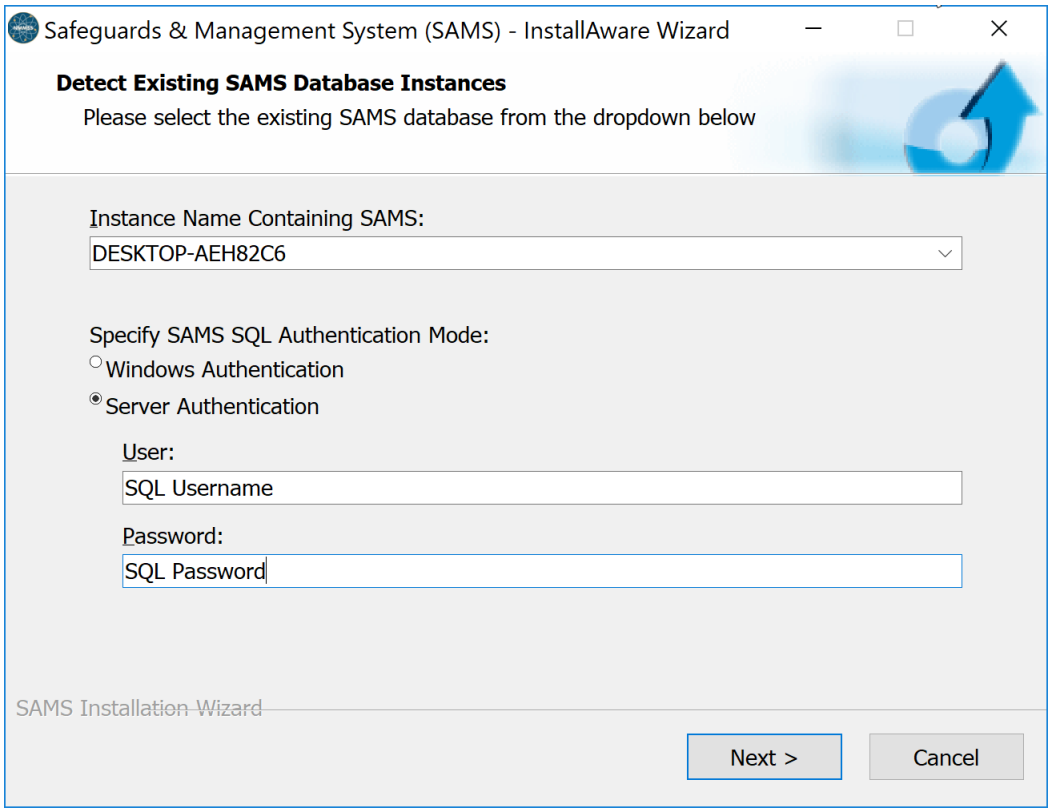

Safeguards & Management System (SAMS) - InstallAware Wizard
Detect Existing SAMS Database Instances
Please select the existing SAMS database from the dropdown below
Instance Name Containing SAMS:
DESKTOP-AEH82C6
Specify SAMS SQL Authentication Mode:
Windows Authentication
Server Authentication
User:
SQL Username
Password:
SQL Password
SAMS Installation Wizard
Next >
Cancel

Figure 9.

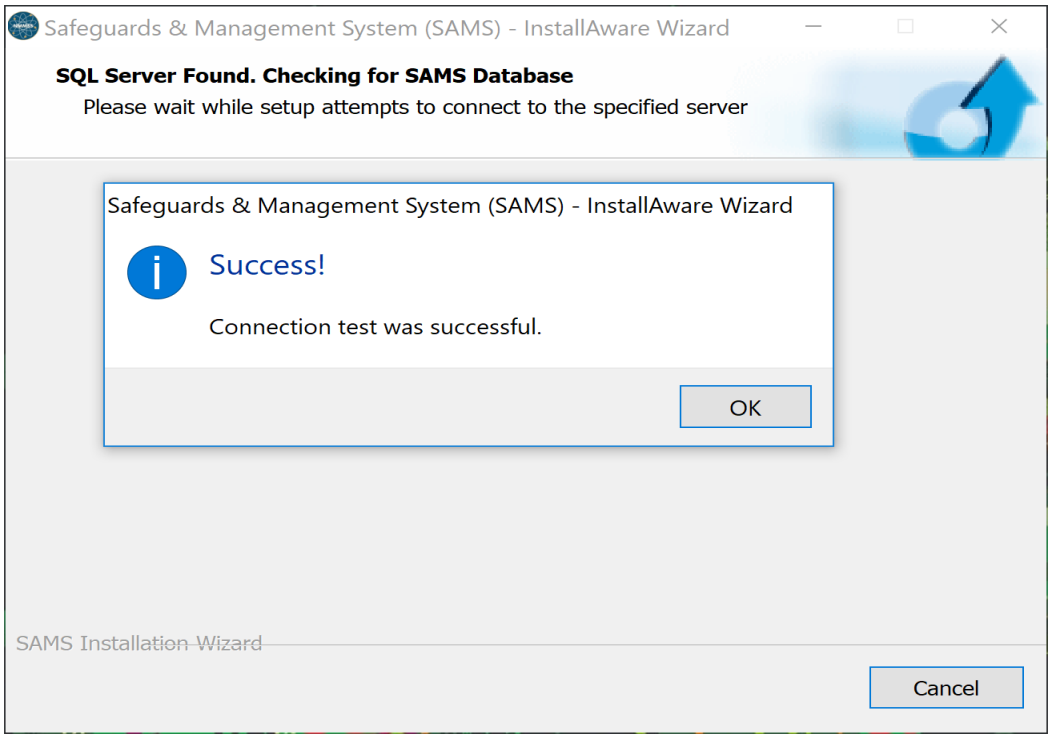


Figure 10.

After selecting the database and clicking next the installer will try and connect to the selected SQL server and verify that it can communicate. If the server information is correct, a message box pop up will appear, declaring that "Connection test was successful." This indicates that the installer was able to connect and talk to the selected SQL server.

If you see the failure message being displayed then the installer was unable to make a connection with the specified SQL server. Please click the "Back" button and retry the SQL configuration. The installation process cannot continue unless the installer is able to communicate with the SQL server.

Please contact your local IT support team if you are unable to connect with any SQL server listed. There may be firewall rules or permissions set on your PC/Network that would not allow you to proceed with the SAMS installation.

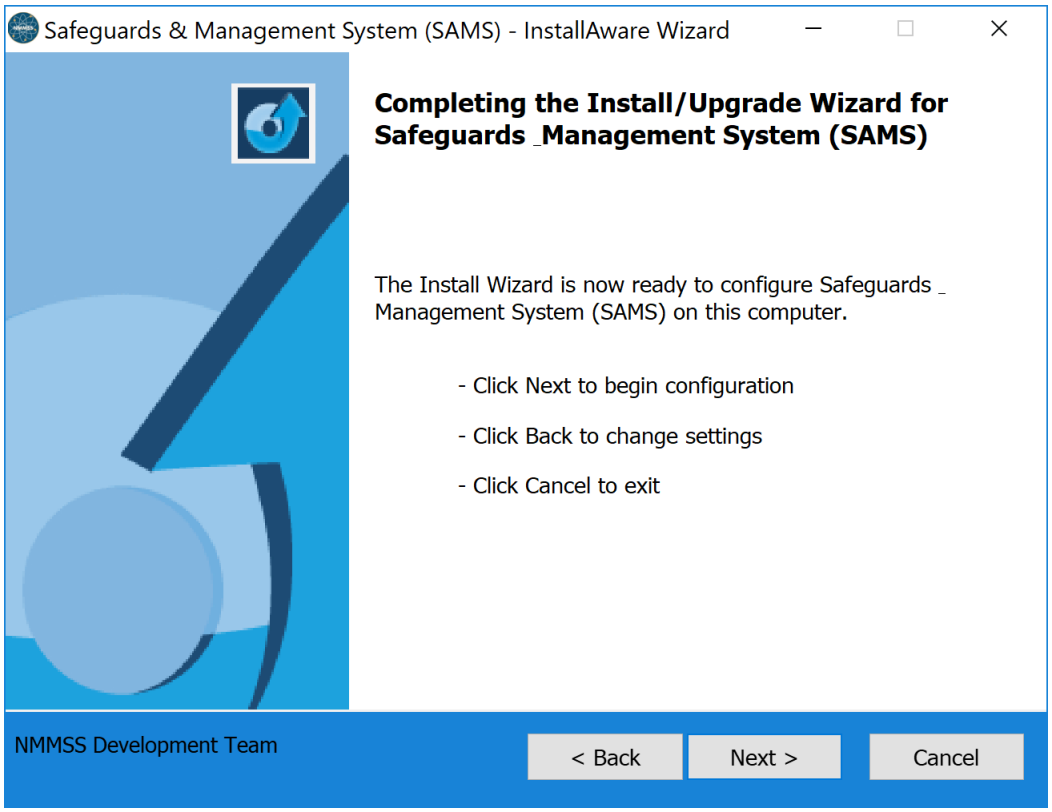


Figure 11.

Once the SQL server portion of the installation is completed you will see a screen similar to Figure 11. You are now ready to complete the deployment process of SAMS 9.0. If you need to go back and make changes to the SAMS deployment configuration this will be the last chance. You can click the "Back" button and return to the previous menus. If you are ready to proceed, click the "Next" button to begin the final installation process.

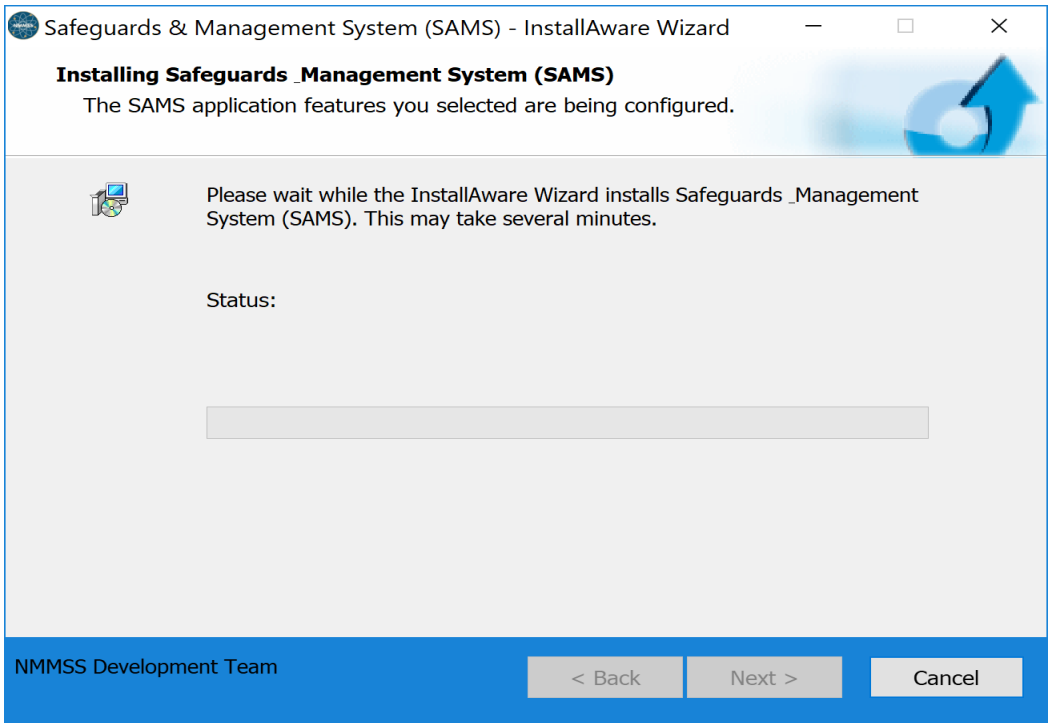


Figure 12.

While the process bar fills up, SAMS is installing the SAMS software on your PC. Depending on the speed of your PC, this will take a few seconds to a few minutes to complete.

Figure 13.

After the installer completes the setup process you will see a screen similar to Figure 13 above. This indicates that the SAMS setup has been completed successfully and SAMS is now ready to be launched. Click the Finish button to launch SAMS (Note: If this is the first time launching SAMS the initial start will take a little bit longer while the first run configuration is deployed).

Congratulations, you are now ready to run and use SAMS 9.0.

In case database connection to SAMS cannot be established on launch:

In the SAMS deployment folder (the folder where you installed SAMS into) there is a file named NMMSS.udl. If you used anything other than the default SQL instance when selecting the SQL server, you will need to manually modify this connection string and point it to the location of the SQL server that contains the newly deployed SAMS 9.0 database.

Please contact NMMSS SAMS support for additional guidance on manually modifying the SAMS database connection string.

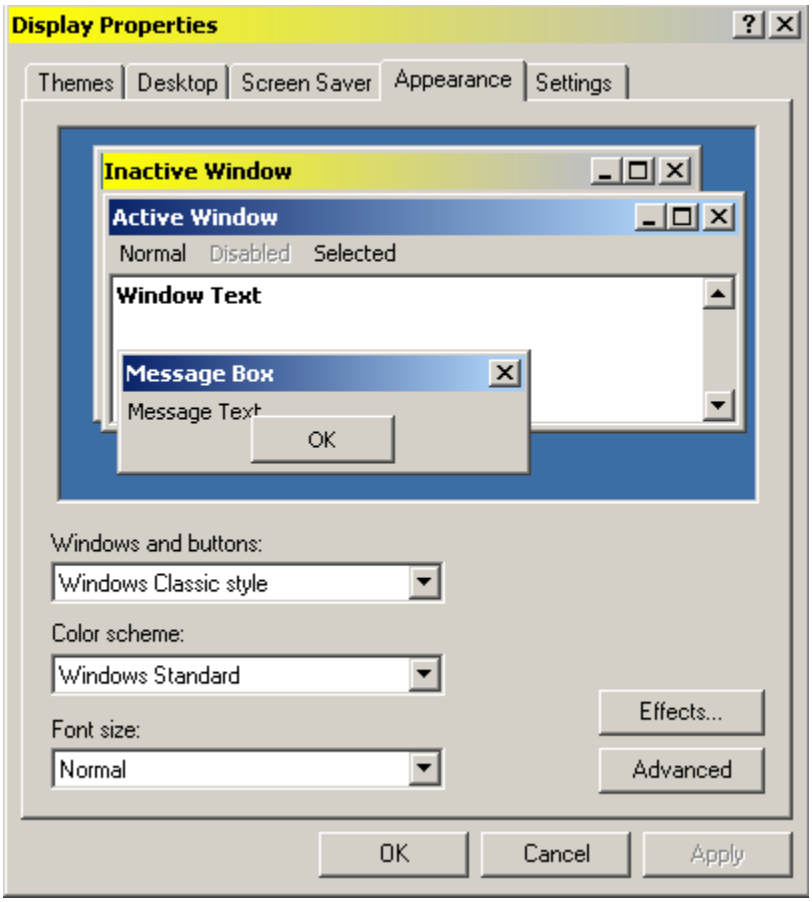
F. Historical Records Display Setup

The SAMS application will display historical records with a yellow background if the display settings are configured correctly. This task is accomplished by updating the display control settings as followed:

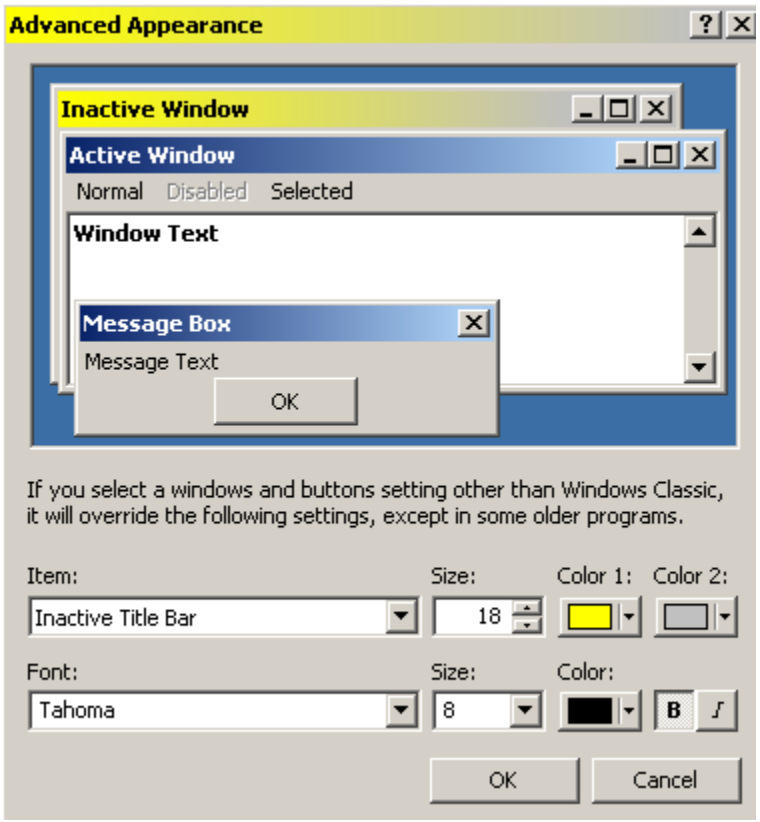
Note: These steps are based on a Windows XP operating system being used to run SAMS. They may vary based on the application being run on the PS or if it being run under a client / server setup.

Open the following Windows menu options:

1. Start
2. Settings
3. Control Panel
4. Display
5. Select Appearance tab
6. Select the Advanced button



7. Once the Advances Appearance window is opened, use the Item dropdown list and select the Inactive Title Bar option.



8. Change the Item - Inactive Title Bar color 1 to **bright yellow**
9. Change the Font color to **black**
10. Click the OK button to close and apply all the changes.

The historical records will now be displayed with a yellow background in any of the SAMS tables / grids. This is a one time setting that needs to be completed by the user during their initial setup to run the SAMS application. Each user may need to complete this task depending on how the user's computer systems are setup and maintained.

III. Conversion of Datasets to XML format

The SAMS application requires that all datasets be converted to the most recent XML format prior to loading them into the SAMS system. Therefore, sites that use the 80 column format or flat files must convert the data over to the XML format before using the SAMS application.

This new version of the XML format is based on the information listed in the DOE/NRC guidance (D-23 Personal Computer Data Input for DOE Contractors and D-24 Personal Computer Data Input for NRC Licensees) effective on January 1, 2009.

Both of these guidance documents list out the new 80 column and XML required formats for NMMSS reporting. These new formats are referenced as **Version 2** or the most current versions of the NMMSS data input requirements.

Any data input, whether it be 80 column or XML, that is based on DOE/NRC guidance prior to January 1, 2009 is considered to be an old format and is referenced as a **Version 1** formats for data entry.

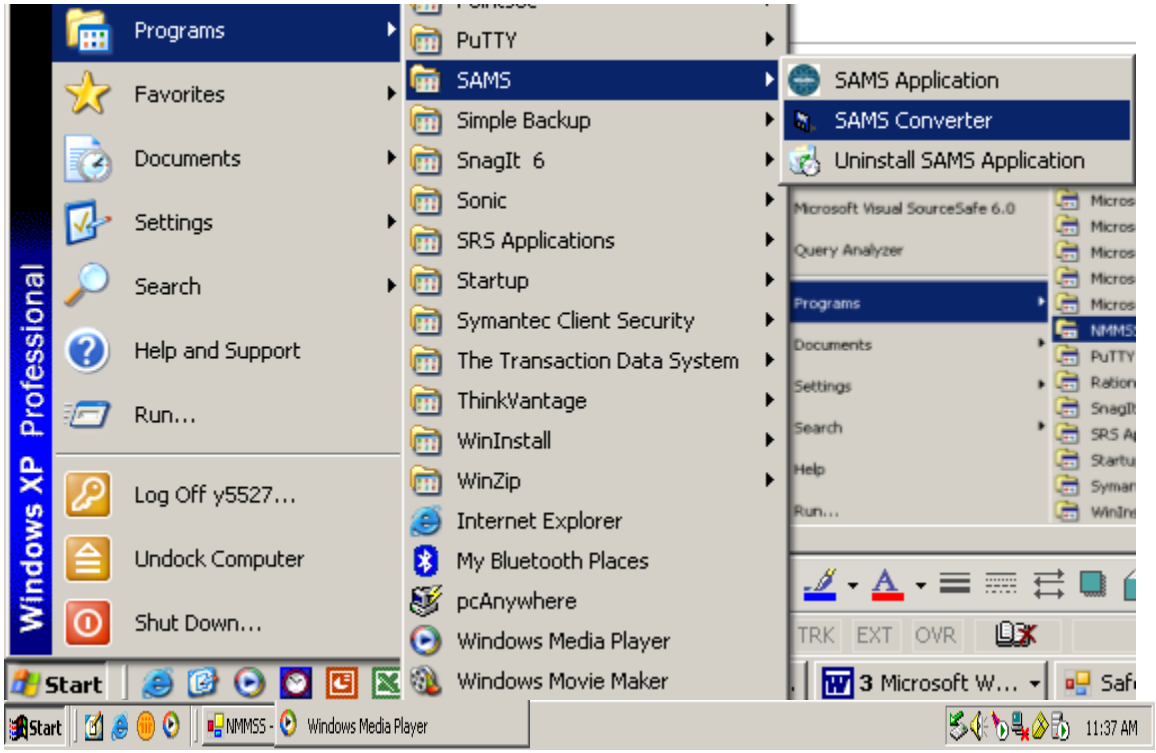
In recap, there are currently four potential sources of data input being used today for NMMSS data operational inputs:

1.	80 column	Version 1	prior to Jan. 1, 2009	(old)
2.	XML	Version 1	prior to Jan. 1, 2009	(old)
3.	80 column	Version 2	Jan. 1, 2009	(new)
4.	XML	Version 2	Jan. 1, 2009	(new)

Note: All data must be converted to the XML Version 2 (**No. 4 above**) for SAMS version 6.0 input. Usually a site or RIS will use only one of the above formats for data entry to NMMSS operations based on the site specific software being utilized. If the data is already in the XML version 2 format, then the SAMS converter is not needed for importing the information into the SAMS application.

The SAMS converter is an additional application that is provided with the SAMS application software. Once the software is installed it can be accessed by going to the Windows Start button and looking under the Program Files. Click on the SAMS Converter icon to access the application.

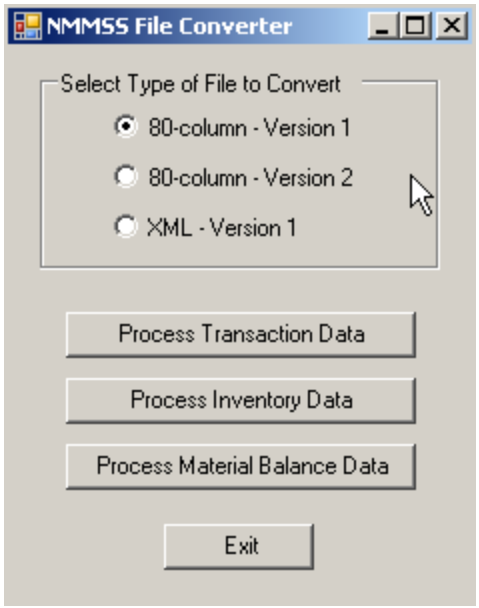
Start: Program Files/SAMS/SAMS Converter



Note: The installation process also places a shortcut button on the desktop of a standalone PC or on the client for a client / server type of installation for the SAMS Converter.

Once the SAMS Converter screen is opened it will display all three of the input types that can be converted to an XML version 2 format. The user will need to select which type of data file will be selected to be converted to XML. After the radio button is selected for the type of file to be converted, then the user needs to select the type of data that is being processed (Transactions, Inventory, or Material Balance).

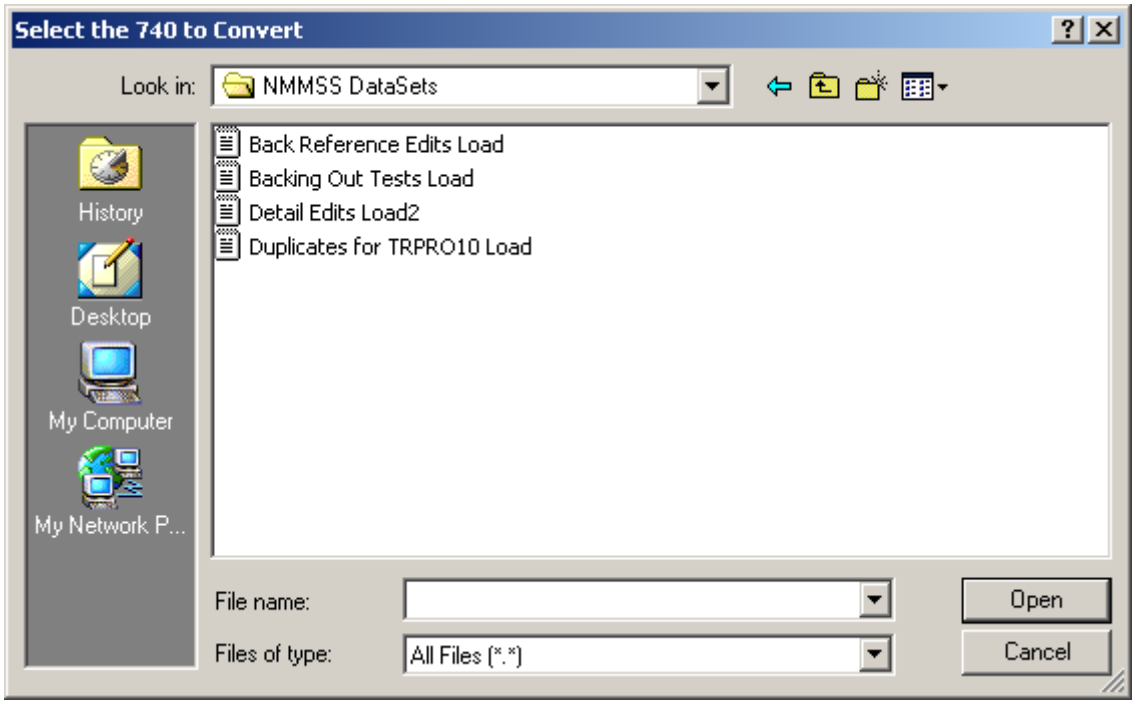
Note: The SAMS Converter box displays all three of the process activities that are available.



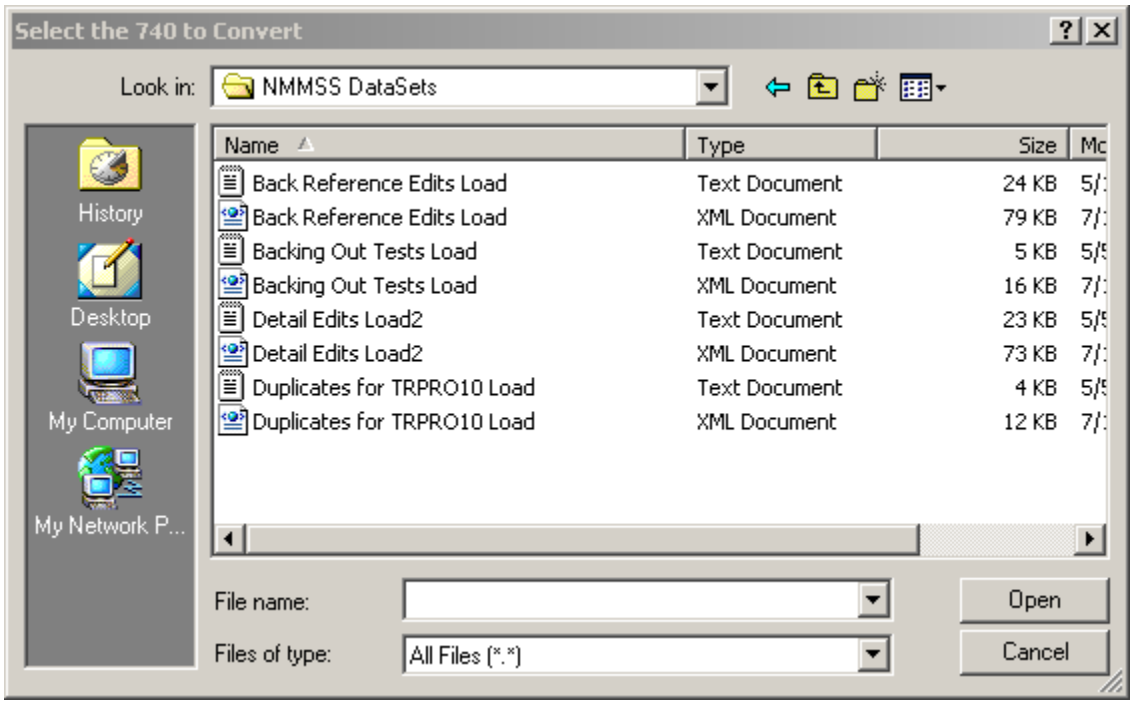
Once one of the process buttons above is selected, the converter will require that the user select the location that the datasets are stored in. This folder is determined by the system user as to where the original dataset is stored and where they want to store their XML Version 2 dataset file once it is processed through the application.

Note: It is recommended that the types of datasets (Transactions, Inventory, and Material Balance) be placed in different folders to minimize the chance that the wrong type of file is selected by the end user.

If at any time the user wishes to cancel the conversion process, they can select the Exit button and the converter will be closed.

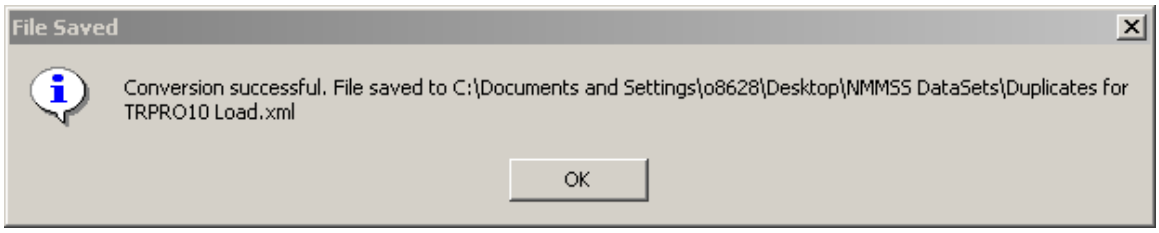


After a data set is selected and the Open button is selected, the converter will make a copy of the file using an XML format. The file name will be the same as the original file name with the .XML extension. Note the new file is placed into the same folder as the original one. Note that the converter will only process one file at a time.



Upon successful completion of the conversion from an 80 column format to an XML version 2 format, the system will inform the user that the file was successfully converted.

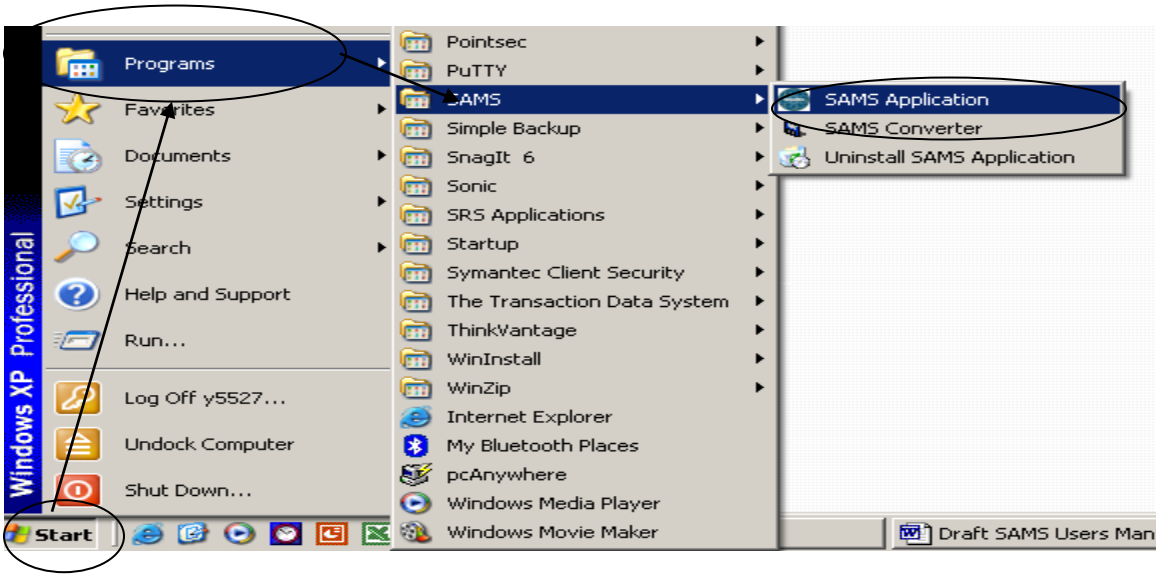
After the file is converted you can start importing the data into the SAMS application for further processing. See SAMS Transactions, Inventory, and Material Balance sections for more information on importing and processing data through the SAMS application software.



Note: A dataset file can be processed multiple times if desired and the system will ask if the previously processed file is to be replaced by the newly created file. This gives the end user the option to make multiple data conversion if they notice any corrections that need to be made to the NMMSS site specific files.

IV. Starting the SAMS Program

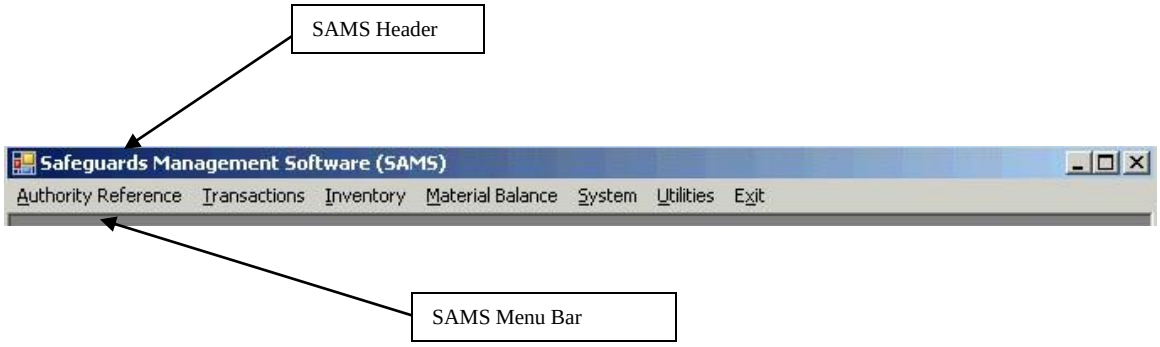
To access SAMS using the Start menu, first click the Start button on the task bar at the bottom of the screen. The Start menu will appear. Point to Programs to access the Programs submenu. Locate the SAMS program and click on the SAMS icon in the submenu to open the program. You will also see a SAMS and SAMS Converter shortcut on your desktop once the SAMS 9 installer has completed the installation of the software. If you do not have a shortcut or performed a manual installation of SAMS you will need to create a shortcut to the C:\[SAMS Installation Folder]\NMMSS.exe file. This is the main executable that will launch the SAMS program.



Note: Depending on the configuration of your system, a reboot may be required after installing SAMS.

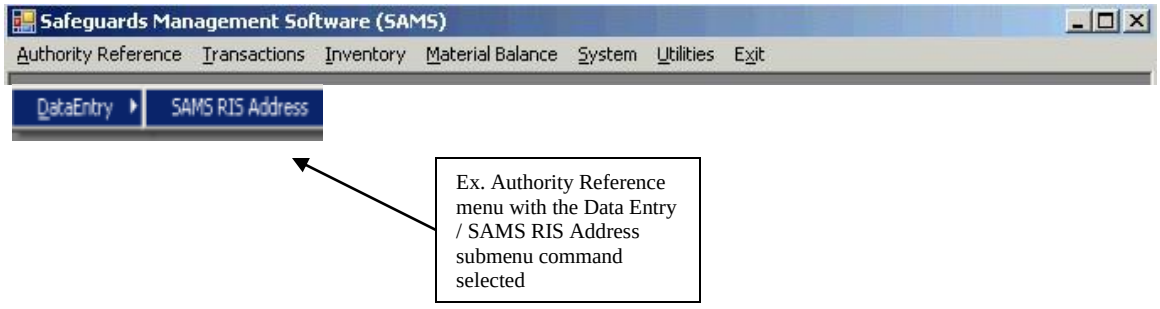
V. SAMS Main Application Screen and Menu Bar

Once you access the SAMS program, a blank screen with a header and a menu bar appears. The following illustration identifies these parts of the SAMS screen.



Here is a screen shot of the initial SAMS screen. I didn't want to hold up your progress on the documentation.

The header shows the SAMS connecting server and the menu bar shows the primary used menus in SAMS. Under each of the menu items is a list of commands. When a command is selected or clicked on, a submenu command list will appear. If a command has a small right-facing arrow next to it, this indicates that a cascading submenu is associated with the command which will appear to the side of the command.



VI. General Functionality for Key Buttons and Fields

This section of the manual discusses the repetitive functions, buttons, and fields that are constant throughout the SAMS program.

A. Key Buttons

The following example is the Key Buttons found on the SAMS RIS Address data table under Authority Reference menu. These buttons are almost on every screen within the application.

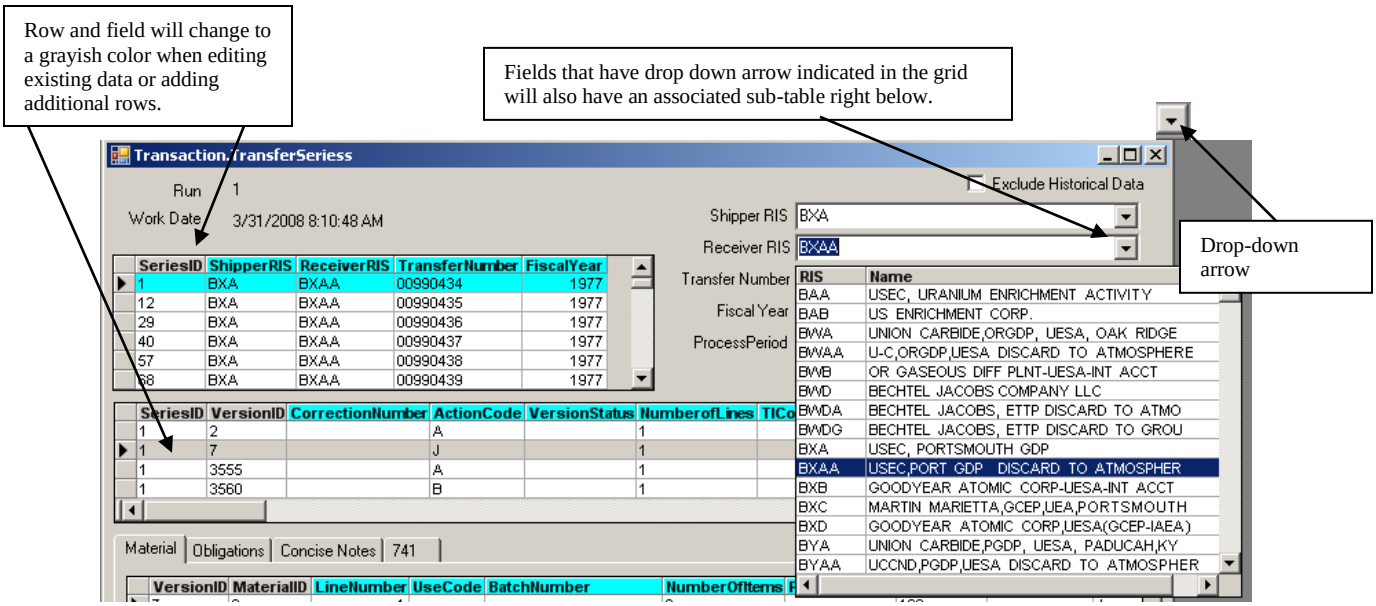
Below is a description of each button function.

Button Name	Description
Copy	Create a new record by copying a record that already exists.
Delete	Marks the selected record(s) for deletion by changing the font style to strike-through. Note that the row(s) are not actually deleted until the user presses the Save or Save Valid button.
UnDelete	Un-marks the selected record(s) for deletion by clearing the strike-through, font style.
Add	Creates a new empty record in the grid. The new record is always added at the end of the grid.
Validate	Checks each record that has been added or changed to ensure that information meets the specified business rules. An error screen will display information identifying where problems were discovered.
Save	Validates and saves those records that passed the verification check, and displays the error screen identifying where problems were discovered. All records must pass validation before any record is saved.
Save Valid	Saves only those records that have passed the verification check. Records that do not pass validation remain in the grid and are highlighted with a gray background. Note: This button is useful only after the Validate button has been pressed.

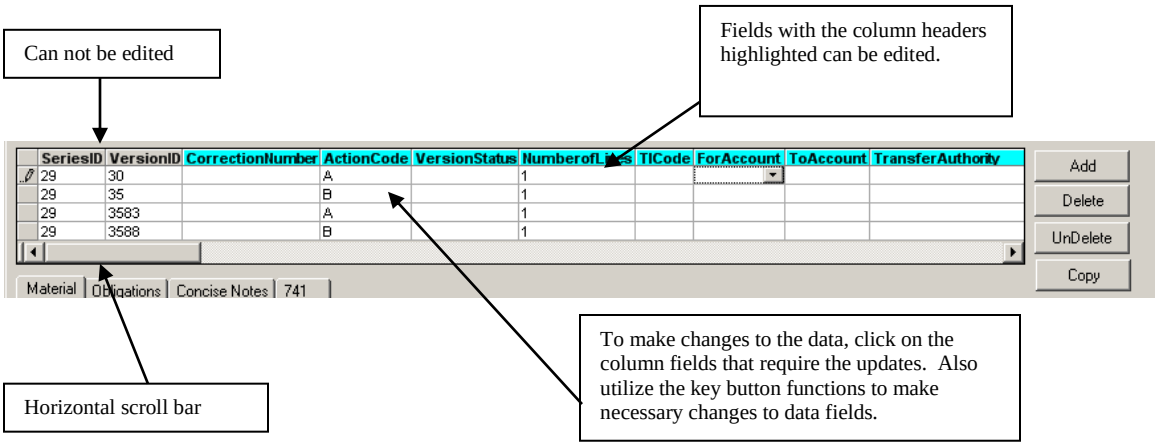
Refresh	If any records have been added, changed, or marked for deletion, the user will be prompted to either save the changes, discard all changes, or cancel. After the user chooses to save or discard the changes, the entire screen is refreshed. This option is like exiting the screen and opening it back up.
Exit	If any records have been added, changed, or marked for deletion, the user will be prompted to either save the changes, discard all changes, or cancel. After the user chooses to save or discard the changes, the screen is exited.

B. Performing Data Entry/ Data Editing

When performing data entry or data editing in the different fields, the column headings that are highlighted (blue) can be edited. Fields with column headings not highlighted or grayish in color are not accessible for data entry or data editing. Also, when editing an existing field or adding an additional row to a table grid, the row being affected will display a grayish color. However, there are tables with fields that have drop down menus that allow for selecting from a pre-programmed list of data in SAMS. These fields have a down facing arrow indicated in the grid with the associated sub-table right below. See the example of SAMS Edit Transactions file below.

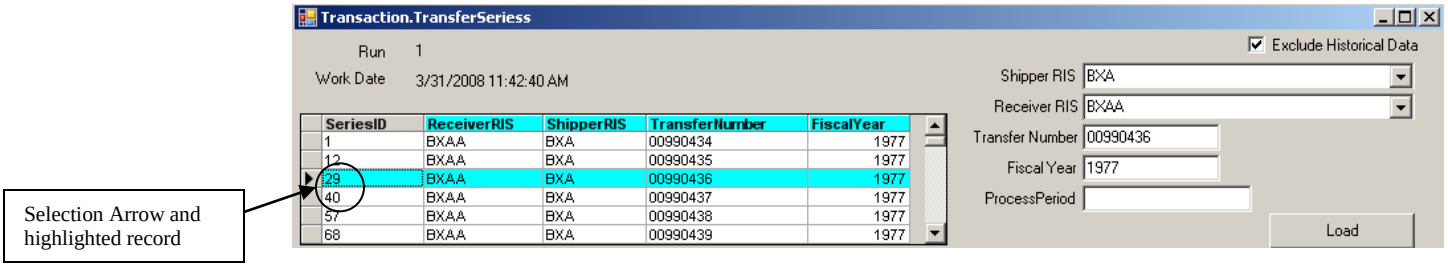


Tables that are too large to view all the data columns, use the horizontal scroll bar to scroll right to view the columns.

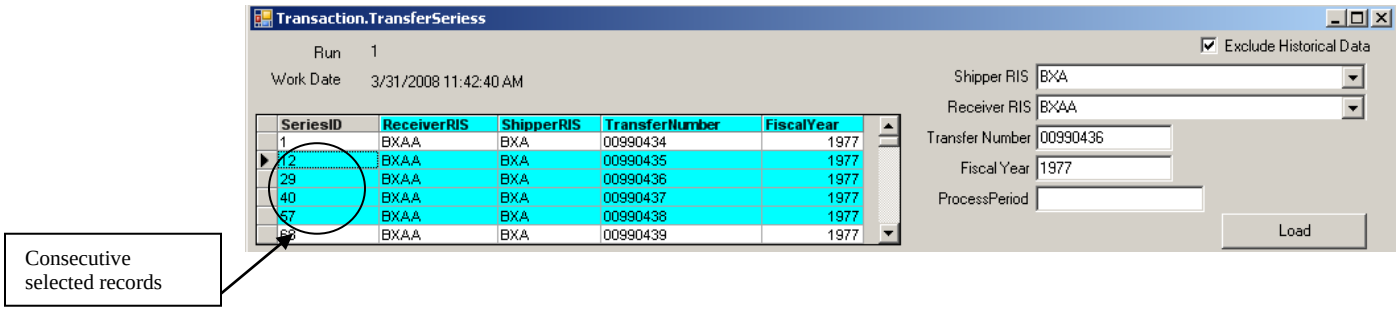


C. Selecting Data Records

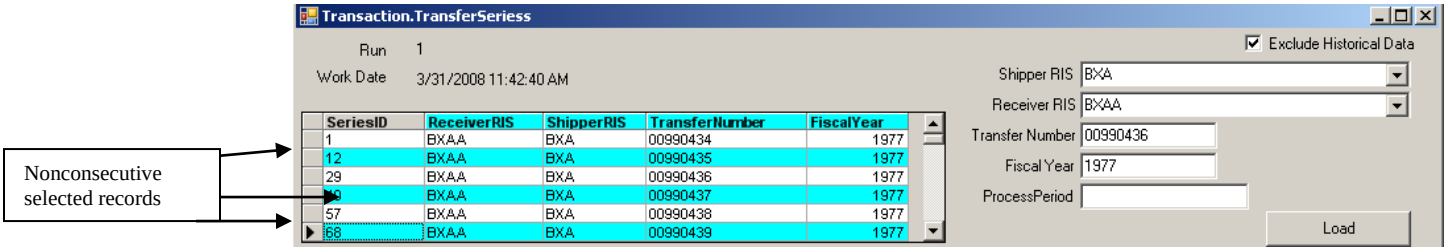
When selecting a single record from a file, point to the left of the desired record grid and click on the left mouse button. The record that is selected should become highlighted with a selection arrow facing right of the selected record. See example below of a single selected record from the SAMS Edit Transactions file.



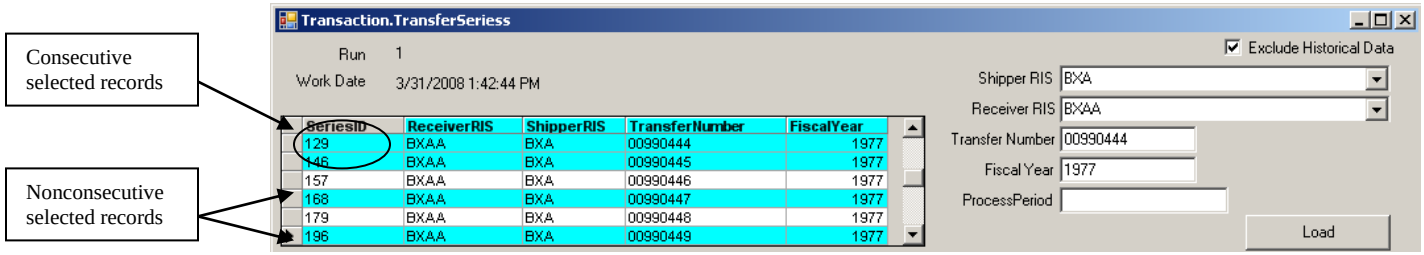
To select several consecutively records, select the first record by pointing to the left of the grid record and clicking on the left mouse button. Then, hold down the SHIFT key and click on the last record to be included in the selection. All the records between the first record selected and the last record selected should be highlighted. Notice the selection arrow facing right of the grid stays with the first record selected. See example below.



To select several nonconsecutive records, select the first record by pointing to the left of the grid record and click on the left mouse button. To select additional records, press the CTRL key while clicking on the left mouse button for each additional record. All the records selected should be highlighted. Notice in performing this function the selection arrow stays on the last record selected. See example below.



To select several consecutive and nonconsecutive records, first select the consecutive records using the SHIFT key. Then, select the nonconsecutive records using the CTRL key. All the records selected should be highlighted. Notice in performing this function the selection arrow stays on the last record selected. See example below.



D. Changing, Reordering, and Removing Columns

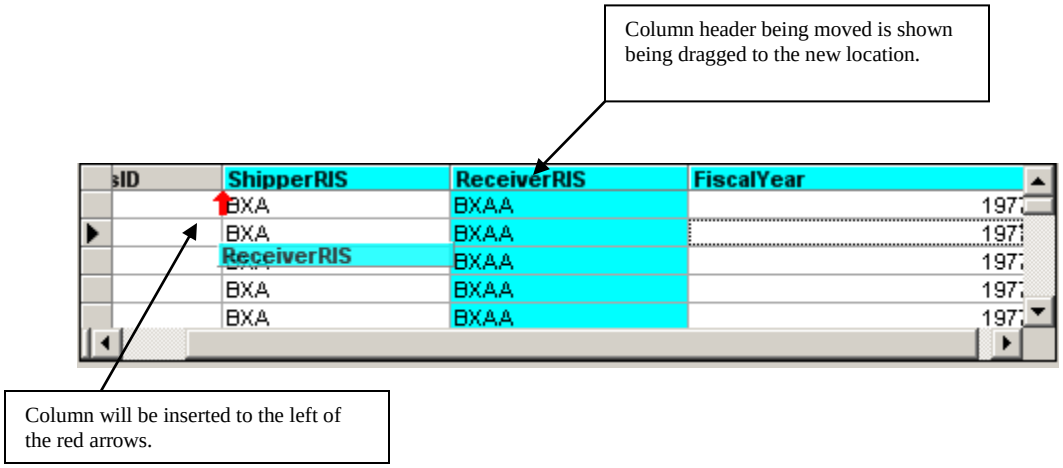
To change the size of a column or remove a column in the table, move the cursor so that it is directly over the vertical line to the right of the column you want to resize or eliminate. When the cursor changes to a line with an arrow on both side, hold down the left mouse button and drag the column line to the desired location.

To eliminate a column, drag the line all the way to the end of the previous column. Once you have set-up the columns in the data table the way you want them, SAMS application will remember your preferences. The next time you access the program, the table will automatically appear in the format you last chose.

Note: This is dependent on each person's user ID and the workstation they are using. The settings do not automatically transfer to another workstation.

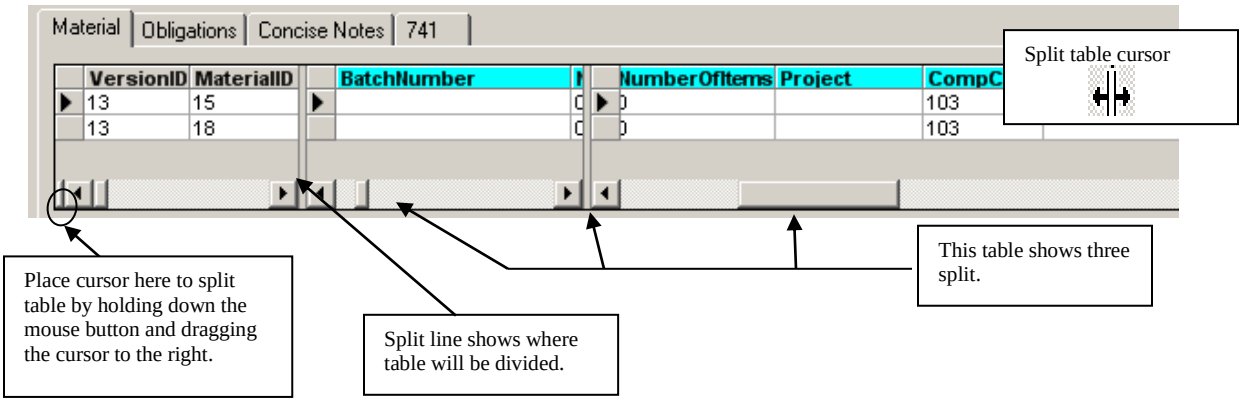
To discard the format, close the window and select System from the menu bar and Restore Defaults. Select the type of restore default change you want to make from the list of Restore Defaults. This will reset the table to the original SAMS format. See System section of this manual for more information concerning Restore Defaults.

To reorder the data columns, move the cursor to the heading of the column you wish to move. The cursor should change to a downward-facing arrow. Click the mouse button to highlight the entire column. With the cursor in the heading of the column, hold down the mouse button and drag the column to the desired location. The heading of the column you are moving should be shown moving with the cursor. Also, a red arrow will indicate the new location of the column. The column will be inserted to the left of the red arrow.



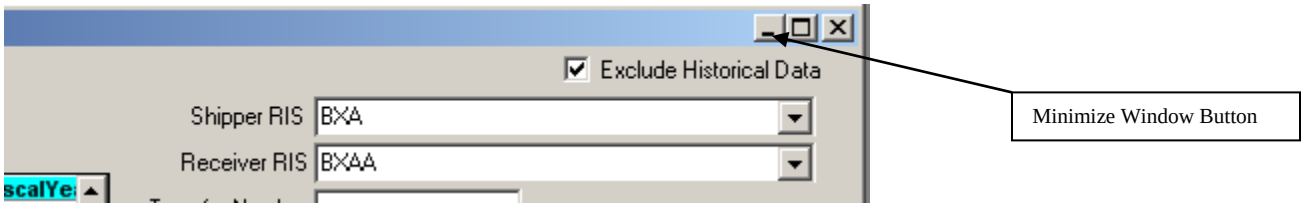
E. Performing a data table split

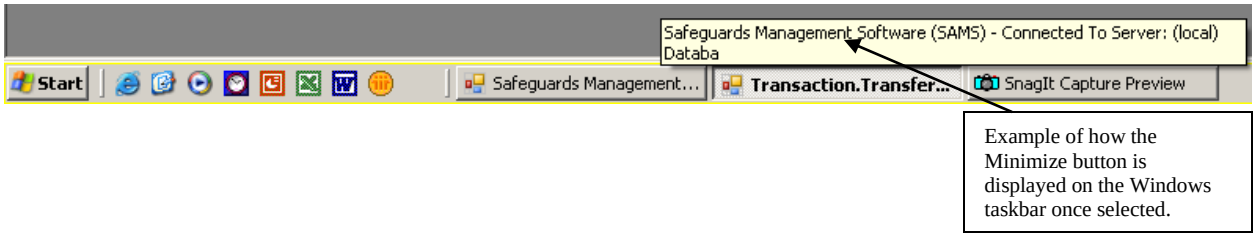
Many data tables contain so much information they cannot be viewed in one window even after eliminating and resizing columns. Viewing all of the data requires scrolling through all of the columns. If you have several items in the table, it can be difficult to keep track of which row of data you need to review. To assist in this, you can "split" the data table. Splitting a table allows you to view specific columns of data at all times while still being able to scroll through the remaining columns. To split a data table, move the cursor until it is on the gray rectangle to the left of the left-facing arrow on the scroll bar. The cursor will change into a special cursor that has two short parallel lines with an arrow on each side. Hold down the mouse button and drag the cursor to the right. A single line will be displayed showing you where the data table will be split. When you have reached the desired split point, release the cursor. You can split a data table as many times as necessary. To remove the split, place the cursor on the split line. When the cursor changes into a special cursor with two parallel lines with outward-facing arrows, hold down the left mouse button and drag the cursor and split line all the way to the left side of the table. The data table should return to its normal appearance.



F. Selecting the Minimize, Restore Down, and Close window buttons

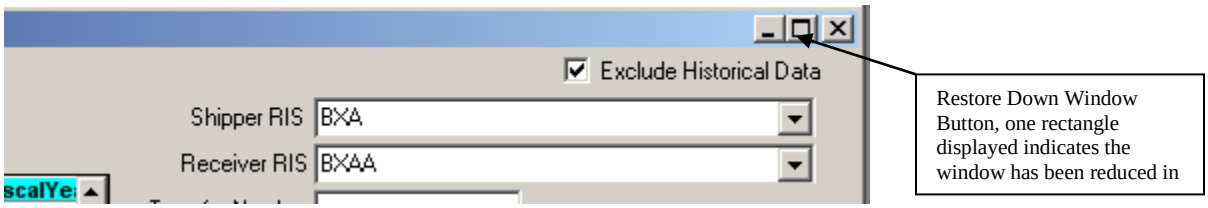
When selecting the minimize window button from the header bar, this function removes the current screen to the Windows taskbar. The active screen is displayed as a button while minimized on the taskbar and can return to full display by clicking on the screen button with the left mouse button. This function can be very useful, if you are working on more than one screen. See a parcel view of the header bar with the Minimize window button below and how the screen button appears on the Windows taskbar once minimized.

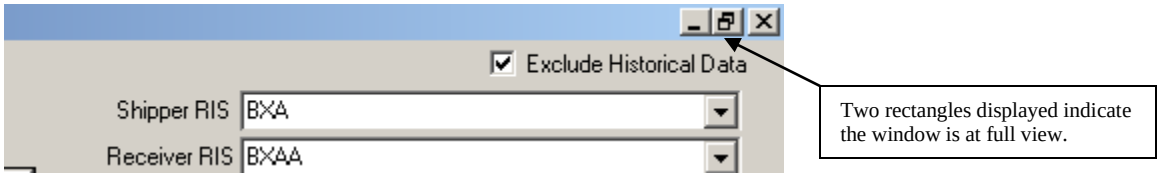




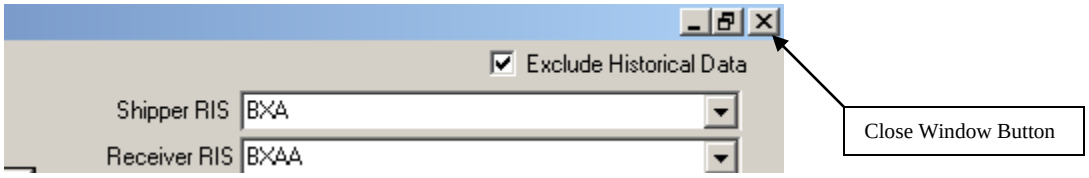
When selecting the Restore Down window button from the header bar, this function restores a window to its previous size and location. The Restore Down button appears on the header bar as a rectangle slightly in front of another rectangle or double boxes. When the Restore Down button appears as one rectangle, this indicates the window has been reduced in size. Two rectangles displayed indicate the window is at full view. See below

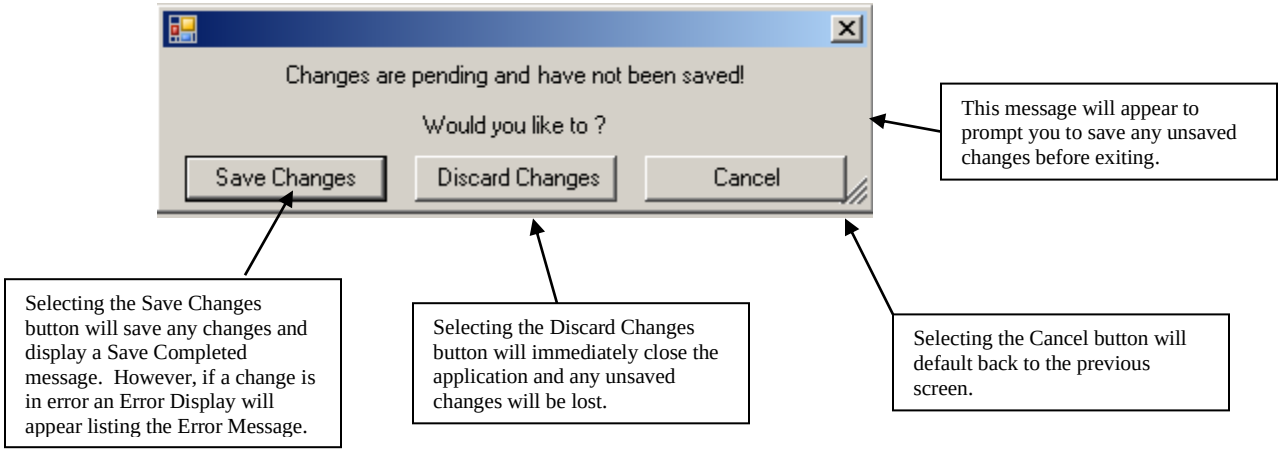
a parcel view of the header bar with the Restore Down window button both at a full and reduce view.





When selecting the Close window button from the header bar, this function closes the application and prompts you to save any unsaved changes before exiting.





VII. Using Shortcut Menus

You can further manipulate data tables using a shortcut menu available in SAMS. Clicking the right-hand mouse button (often referred to as "right-clicking") in a window with a data table displays a shortcut menu. The shortcut menu commands allow you to go to a specific entry, paste information into new rows, sort the data, or restore the data table to its original form.

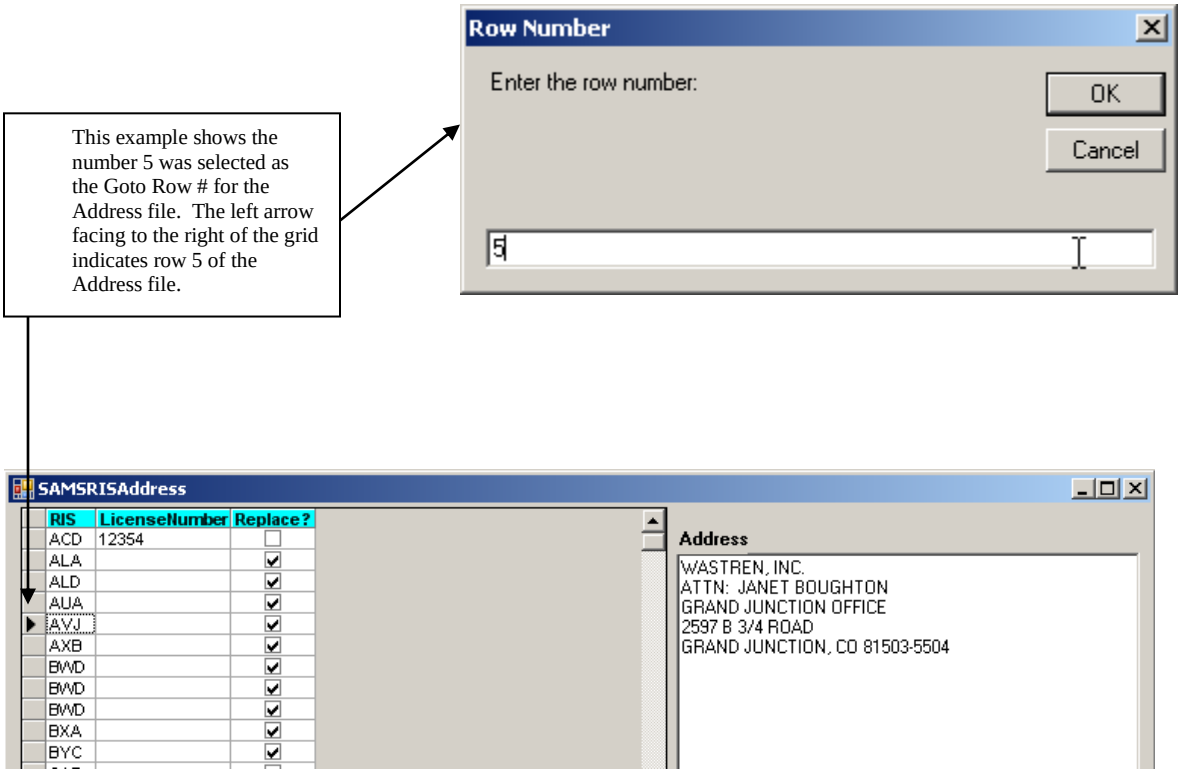
The following paragraphs describe the shortcut menu commands and their use.

A. Goto Row # Command

The Goto Row # command is used to go to a specific line of data within a table. This can only be used if you know the number of the row of data you need to view. This command is most useful when working in the large tables. See example below where the Goto Row # command was used for the Authority Reference SAMS RIS Address file.

Using the Goto Row # Command function

1. Right click the mouse button.
2. Select Goto Row # from the shortcut menu.
3. The Grid Control dialog box should appear, indicate the Goto Row # in the blank window.
4. Click the OK button.

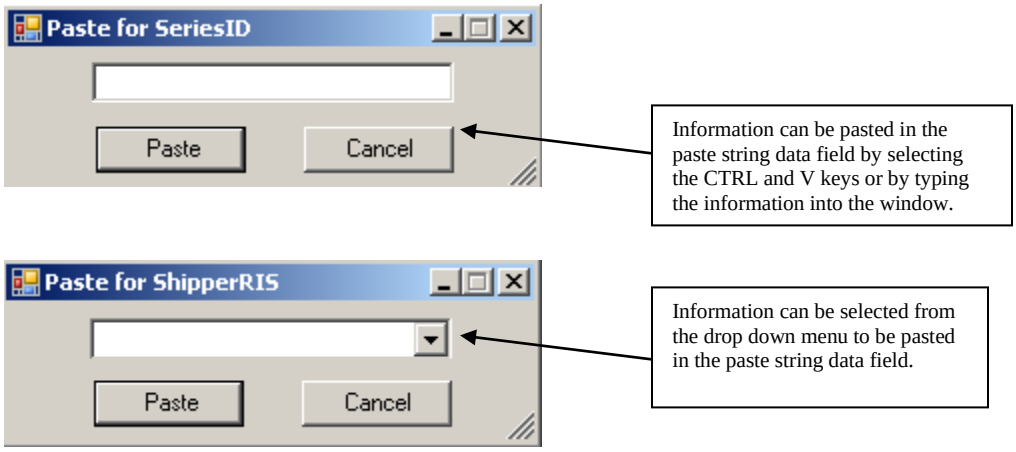


B. Select, Deselect, and Invert Selected Records

These commands are used to select large amounts of data from a data table. The Select All Records command allows you to select all the rows of data displayed in the data table. To deselect the data once it is selected, you can either click in any column of the table or access the shortcut menu and click the Deselect All Records command. If you want to select most, but not all, records from the data table, you can select those records to be eliminated and then use the Invert Selected Records command. The previously highlighted items will be deselected, while the remaining data will be selected.

C. Paste Command

The Paste command allows you to paste a specific set of characters (referred to in SAMS as a string) into all selected rows. You can either type the string of characters into the field on the Paste String data field window or, before selecting paste, you can "copy" the characters you want to paste from one cell of the table by highlighting the characters and pressing CTRL + C. To paste the selected information into the paste string data field window, press the CTRL+V keys. Column fields that have drop down menus can also be use to paste data in selected columns. However, the information must come from the drop down menus selection. This is indicated by the down arrow to the right of the paste screen window.



To paste information into a column

1. Highlight the desired information and press the CTRL and C keys at the same time. (Optional. This is used if you do not want to type information into the paste string data field.)
2. Highlight the rows in which you wish to paste the data.
3. Click the right-hand mouse button to activate the shortcut menu. Ensure you are in the column in which you want to perform the paste.
4. Click the Paste command.
5. Click inside the paste string data field and press the CTRL and V keys at the same time to paste the data into the paste string data field. (Optional. This is used if you do not want to type information into the paste string data field.)
6. Click the paste button. The new data will be pasted into ALL rows of the selected column.

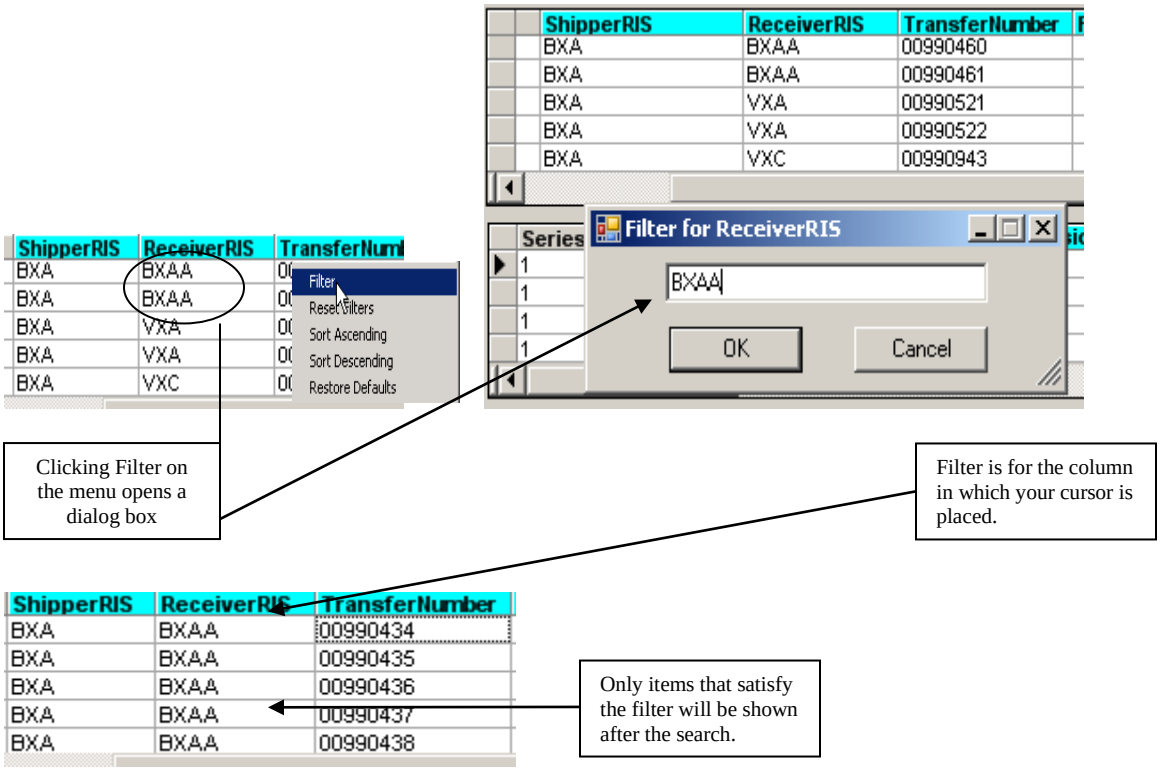
Note: No data is saved until the "Save" button is selected.

D. Filter

This menu option allows you to specify additional selection criteria to eliminate some of the data found during the first search of the database. For example, you can use the filter to eliminate data you no longer need and concentrate only on data you want to view.

To use a filter

1. Place the cursor anywhere in the column containing the data you wish to filter.
2. Click the right-hand mouse button. The shortcut menu will be displayed.
3. Select Filter from the shortcut menu. A dialog box will appear asking you to type in the filter for the column of data you have selected.
4. Type in the additional selection criteria for the data. For example, typing "BXAA" in the Filter window (shown in the following illustration) finds only items with a "BXAA" in the column. Any data other than "SC" is eliminated.
5. Click OK. Only the items that meet the filter criteria will now be shown in the data table.



E. Reset Filters

The Reset Filters command on the shortcut menu eliminates any filters you previously applied and displays all of the original data.

F. Find

The Find function locates the very first record in a table that meets the specified search criteria.

G. Sort Ascending and Sort Descending

This menu option allows you to sort the data in the table.

To sort the data

1. Place the cursor anywhere in the column containing the data you wish to sort.
2. Click the right hand mouse button. The shortcut menu will be displayed.
3. Select either Sort Ascending (e.g., A→Z) or Sort Descending (e.g., Z→A) from the shortcut menu.

The data will be sorted automatically.

H. Restore Defaults

The restore defaults command returns the data table to its original form. This command is useful if you have eliminated or rearranged a data table and now wish to return it to its original state. Note that under the shortcut menu options that only the data table that is selected will be reset to the original form. This can be a sub-set of the screen that is being viewed.

I. Export

The Export function captures SAMS table grids and saves the information to other selected applications. The Export function is accessed by clicking on the right hand mouse button and selecting Export from the shortcut menu display.

J. Print

The Print function prints selected SAMS table grids to the specified printer. The Print function is accessed by clicking on the right hand mouse button and selecting Print from the shortcut menu display.

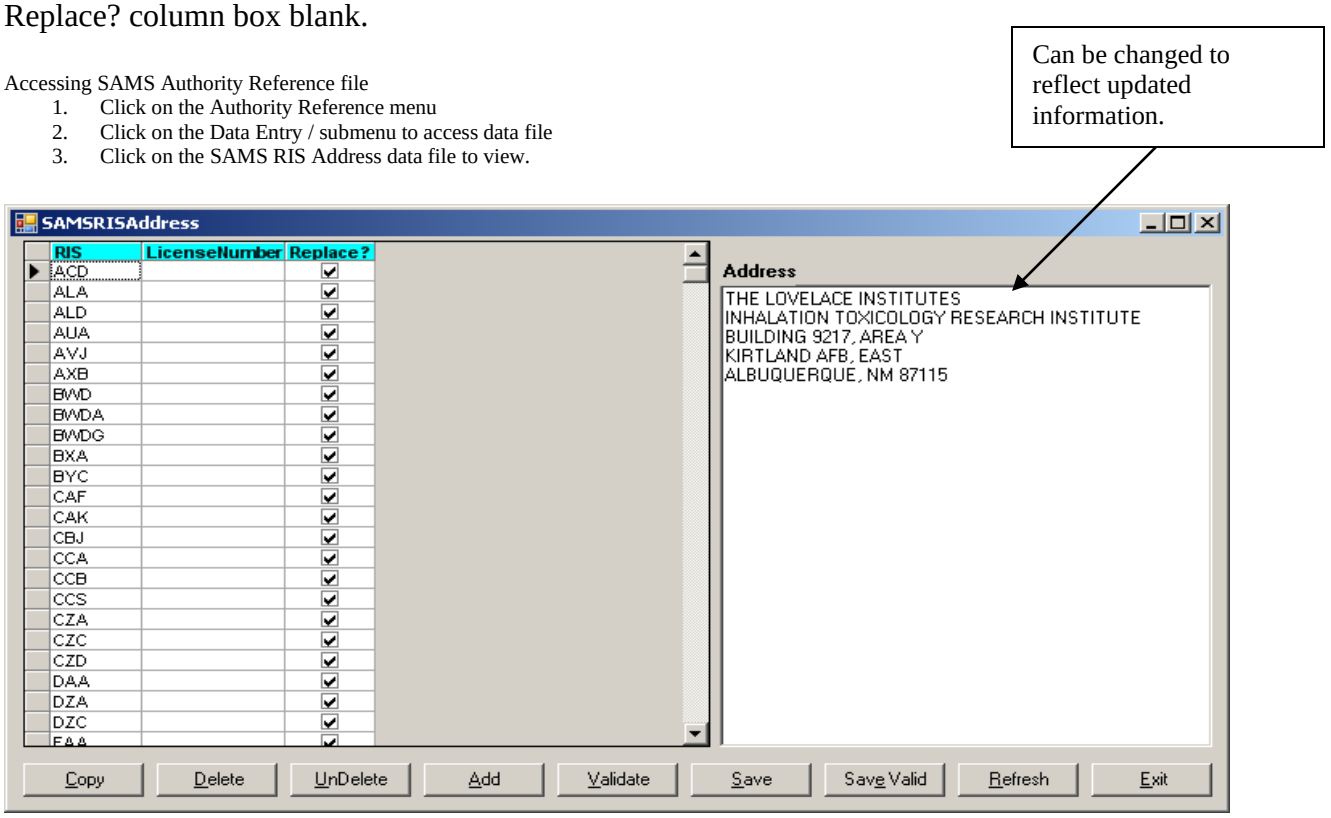
VIII. Authority Reference

The Authority Reference menu provides the SAMS user the ability to create, edit and update information concerning the facility RIS Address through the Data Entry submenu. Once the RIS Address file is selected and opened, only the column headers that are highlighted can be manipulated. The SAMS RIS Address file has three editable columns RIS, License Number, and Replace. It also has a window that displays the address information associated with a given RIS. See example below of the screen file.

Note: When updating the facility information place a check mark in the Replace? column to update the RIS information. If you do not want the information changed leave the Replace? column box blank.

Accessing SAMS Authority Reference file

1. Click on the Authority Reference menu
2. Click on the Data Entry / submenu to access data file
3. Click on the SAMS RIS Address data file to view.



The user has the option to update the Address information for a selected RIS if desired. This way the information can be updated if changes have occurred prior to the Authority Reference NMMSS data being updated from DOE-HQ. All changes must be Saved prior to exiting the screen.

The Authority Reference data will be published for updating the SAMS application on a routine basis.

IX. Transactions

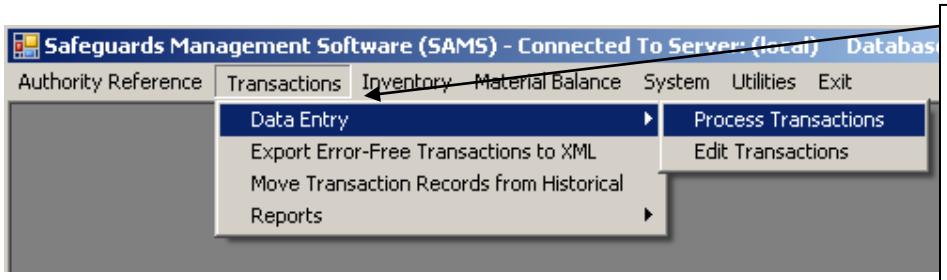
The Transaction menu option is used to enter information concerning transfers of nuclear material from one location to another which is generally submitted on a DOE/NRC form 741.

The Transactions menu function has four options that the user can select from. These options are Data Entry, Export Error-Free Transactions to XML, Move Transaction Records from Historical, and Reports. When the Data Entry submenu is selected, an additional two options are available to select. They are Data Entry/Process Transactions, and Data Entry/Edit Transactions.

The Export Error-Free Transactions to XML function captures all the transactions that have been cleared with no errors and exports the files into an XML file to be submitted to NMMSS.

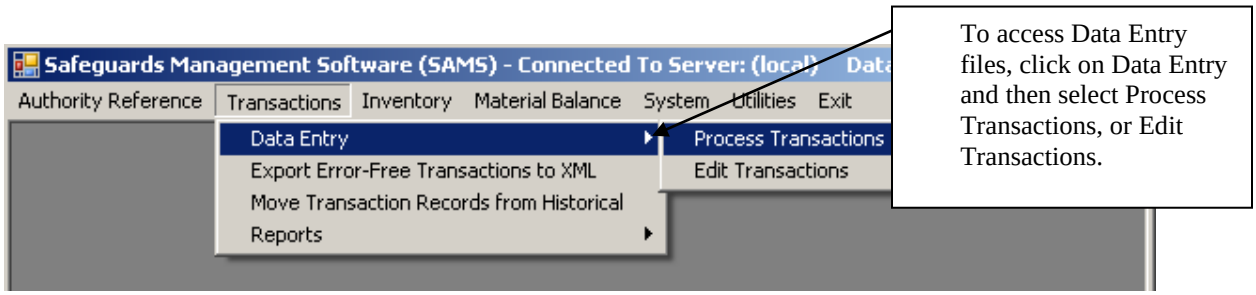
The Move Transaction Records from Historical function allows the user to move the once closed transaction back to an active status for changes.

The Transactions Report submenu has two reports to select from which are 741 Simulated Report and TJ-002s Transaction Data Errors.



1. To access Transactions, click on Transactions menu.
2. Select from Data Entry, Export Error-Free Transactions to XML, Move Transaction Records from Historical, or Reports.

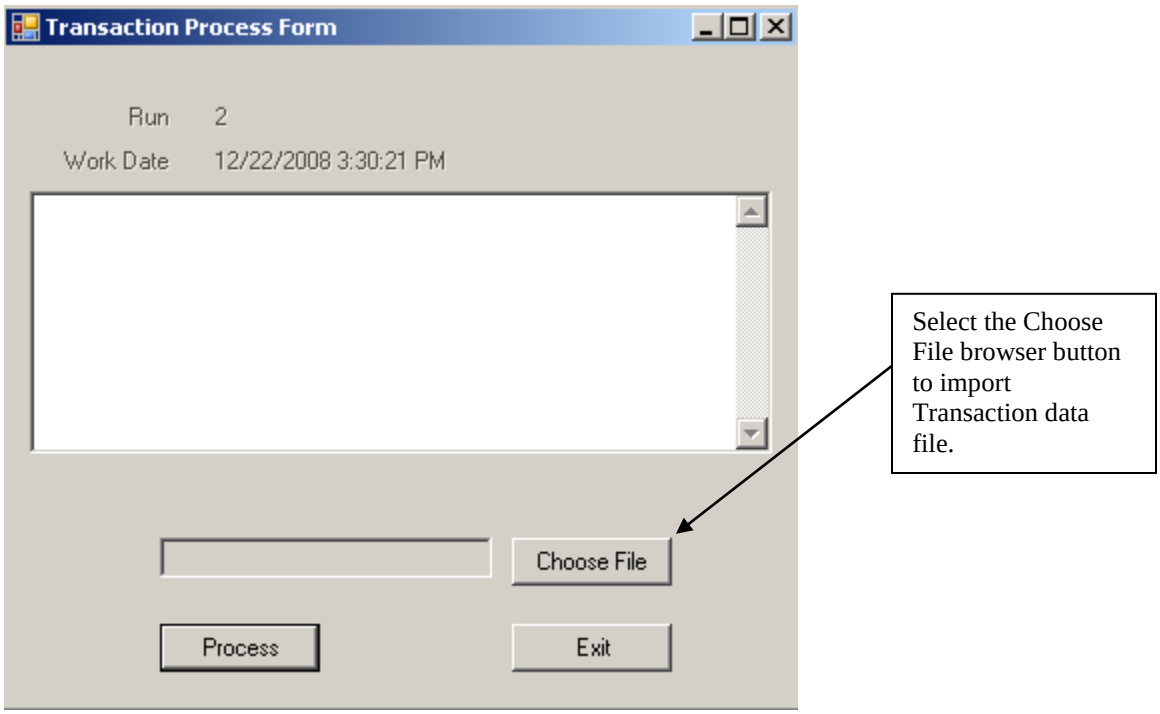
A. Data Entry Transactions



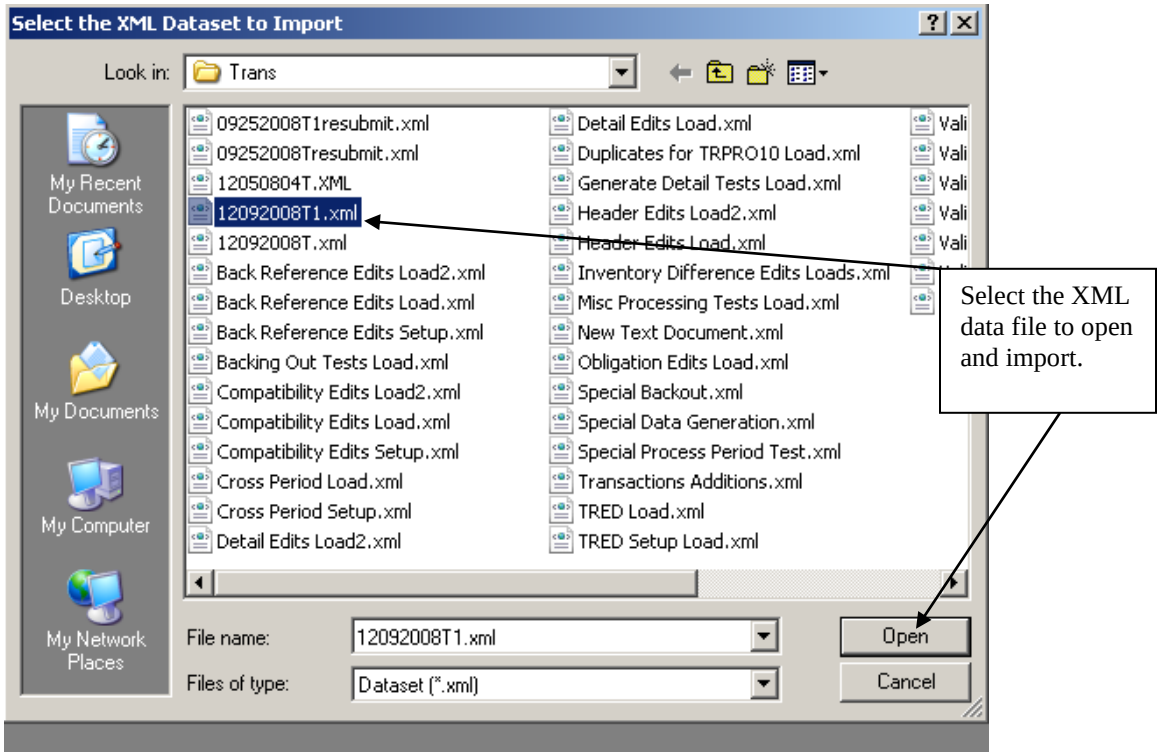
1. Process Transactions

The Data Entry menu option for Process Transactions opens the screen view in which data can be processed and edited checked. For Process Transactions function, the following screen will appear concerning processing data. This function is used to import transaction data into SAMS.

When importing data, the screen below provides a Choose File browser button for selecting the data file to import.

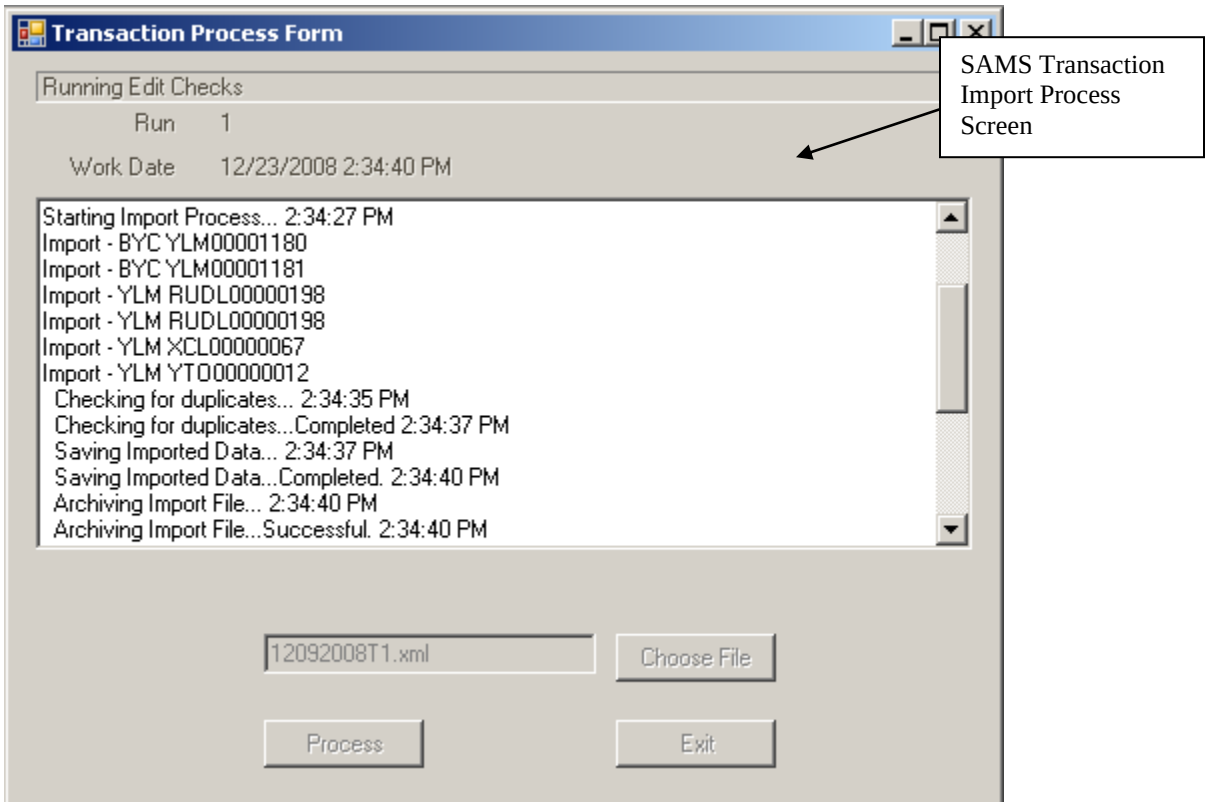


To Import transaction XML datasets, click on the Choose File browser button from the transaction import screen and select the XML data file to import. The XML Dataset to Import file location screen will automatically display. Select the dataset to be imported by selecting it and then clicking on the open button.



Once the data file is selected and it appears in the Choose File window, click on the Process button to execute the data file import.

The transaction import process will automatically start processing the data, and saving each record associated with the dataset. A message will appear in the Import window indicating the import is complete (see example below of the Import process screen). You can scroll up and down the import window as the run is occurring to view the results.

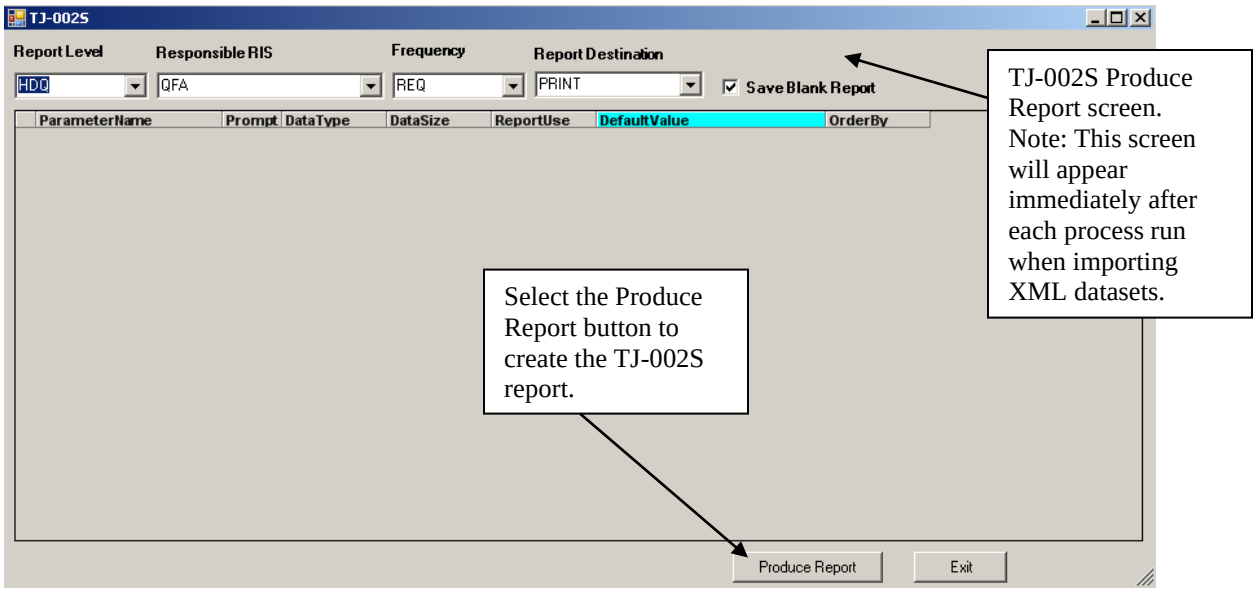


Immediately after the process import is complete, the TJ-002S Transaction Error Report screen will display for producing the error report. If there are more data files to import just click on the Exit button on the TJ-002S and repeat the import process.

If there are more transaction datasets to be imported repeat the Transactions import process. However, the Produce TJ-002S Report screen will appear for producing the TJ-002S report immediately after each process run (see example below of the TJ-002S produce report screen).

Note: Once the TJ-002S Produce Report button is selected it will automatically open into Microsoft Internet Explorer for viewing and will save the report in its designated file location. To print the report, select the Internet Explorer File menu and print.

Select the Exit button on the Produce TJ-002S Report screen and return to the Transaction Import screen to process more XML datasets.

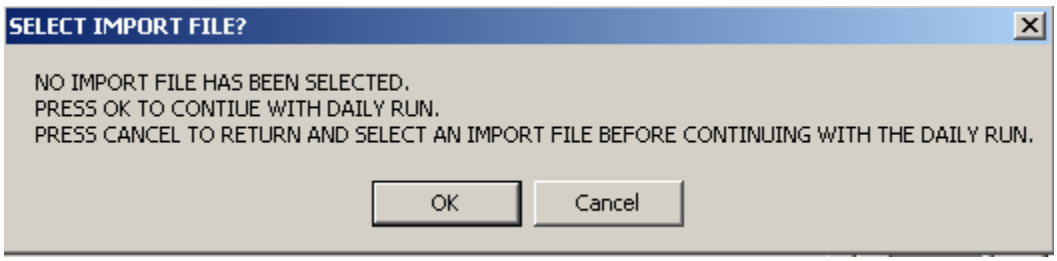


Note that if a TJ-002S Transaction Error report is generated with a No Data designation on page 2 of the report then there were no errors associated with the process run being conducted.

2. Run Transaction Edit Checks only

If new transaction data has been manually entered or existing data has been manually adjusted, the user **must** re-run the NMMSS Edit Check process using the Transaction Processing form by selecting the Process button without selecting a file to be imported.

A window will appear noting that no file has been selected and give the user the option to continue with the processing run (edit checks) or cancel and start over with the file selection process to import information.



3. Edit Transactions

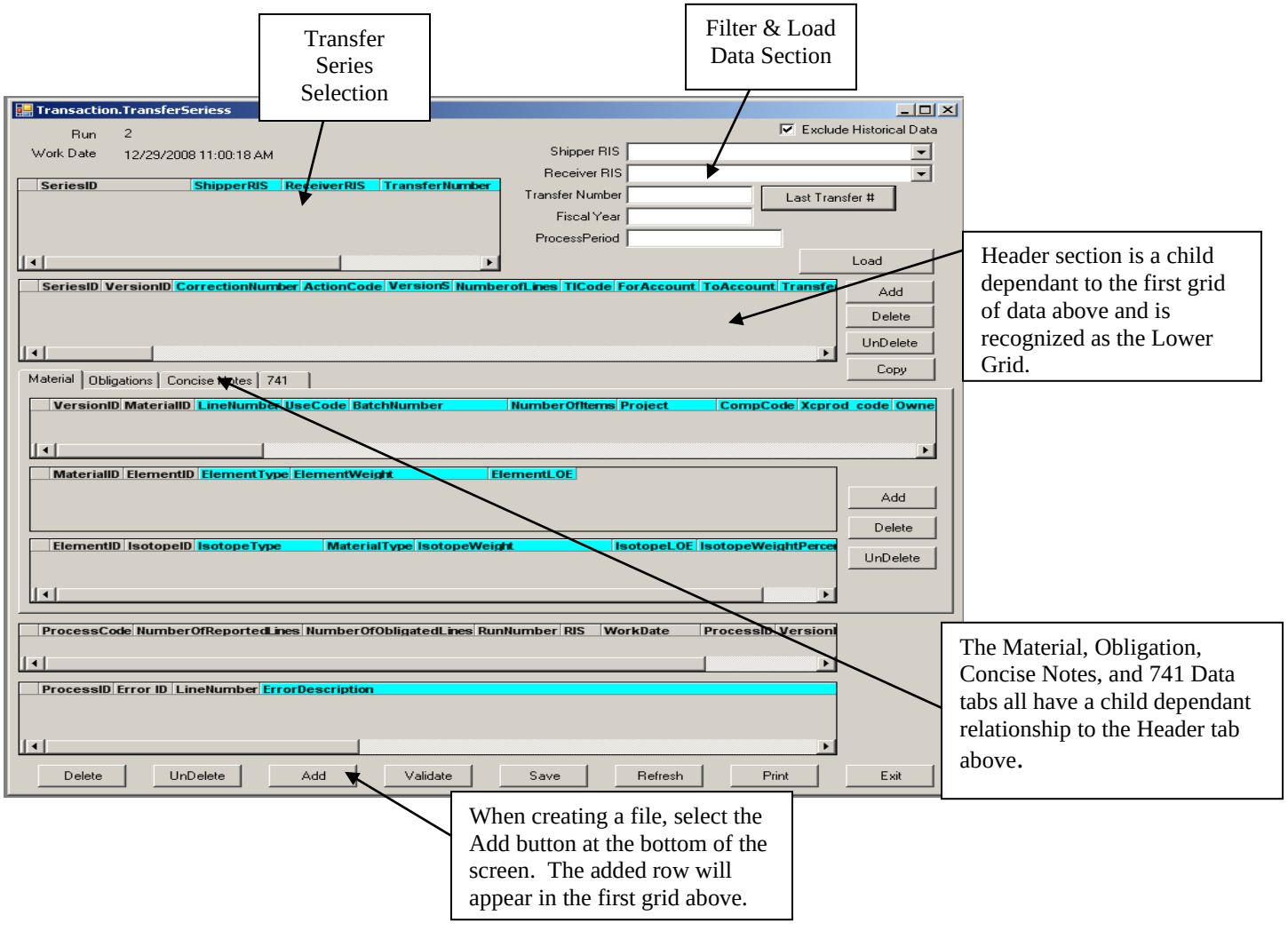
The Edit Transaction option allows the user to view previously imported data loaded through the Process Transaction function or manually enter transaction data into the

system. To view existing data, the user must query the application to pull up the required records. In performing the Edit Transactions function you have the option of selecting the load button to generate the transaction records, or you may add / manually input the transactions record data in the various fields to be processed.

The Edit Transaction screen is divided into several sections as followed:

1. Filter and load data records section
2. Display of Transaction Series IDs information
3. Header records
4. Material, Obligation, Concise Notes, and 741 data

Note: Only column headings that are highlighted (Blue) can be edited. Once changes are made to a file, that particular file will gray out in the grid.



When actually viewing the screen, the number of columns or the column header width can be too large to view the entire file on the screen. Use the scroll bar or split screen to adjust the columns to your preference. The Edit Transactions screen below is shown in sections, so that the different data entry windows can been viewed.

There are several new functions that need to be reviewed. This is the Exclude Historical Data box along with several new buttons listed on the Transaction Edit screen as noted below.

Button Name	Description
Last Transfer #	After entering the Shipper and Receiver RIS in the filter press this button to determine the last transfer number utilized for the series.
Load	The load button retrieves all transfer series based upon the filters.
Print	The Print button produces the 741 for the selected header record(s). Note: Only one or two header records can be selected.

To view historical data, click inside the box to remove the check mark from the Exclude Historical Data box.

Note: File rows that are highlighted yellow in the table grids are considered historical data which cannot be modify even though the column headings are highlighted blue.

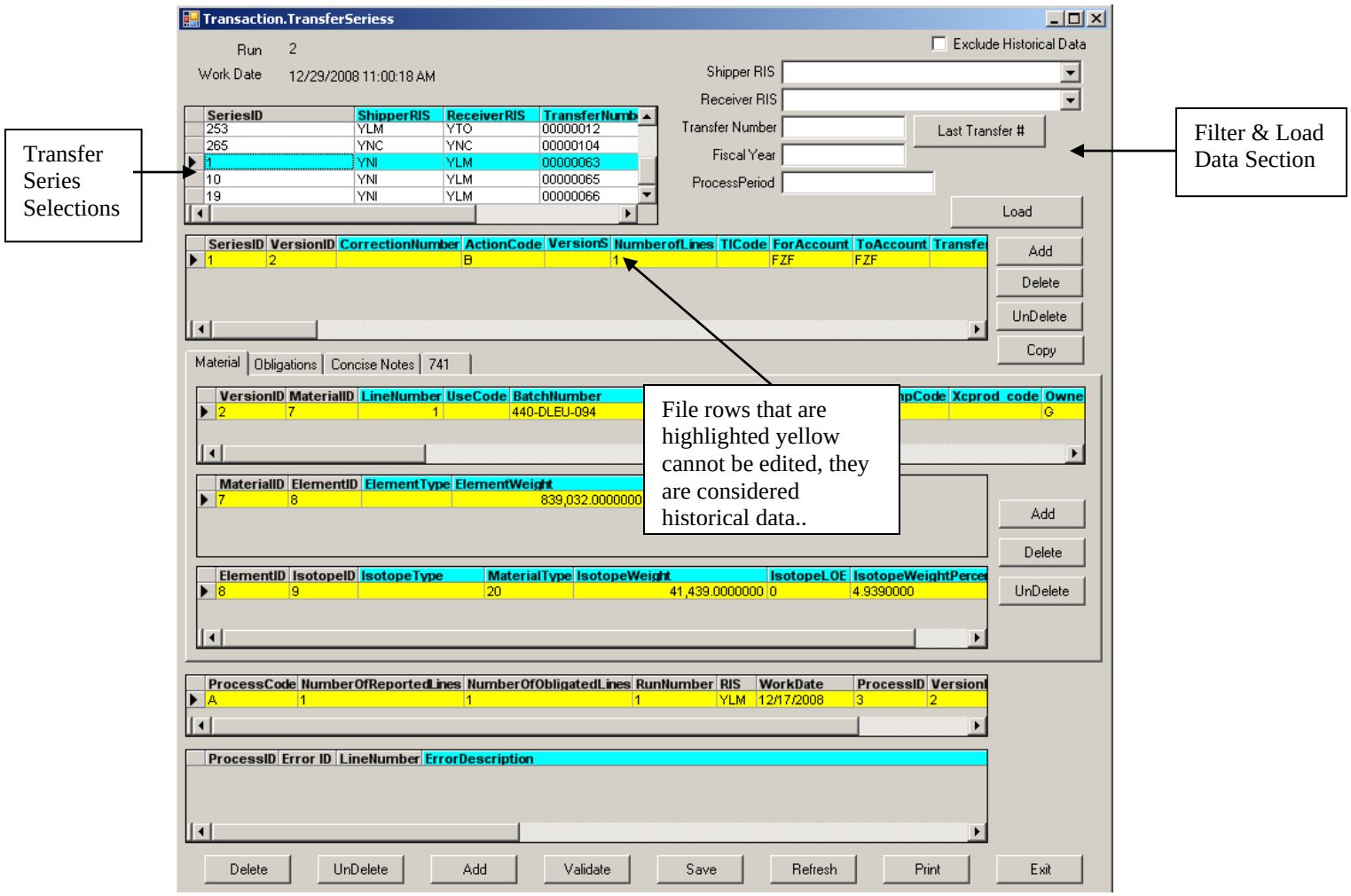
When adding files under Edit Transactions the Process period will be automatically updated to reflect the current process period.

The first portion of the screen display (upper right) provides drop down menu options to select the Shipper RIS and Receiver RIS performing the transaction. This is known as the Query selection section. After selecting the Shipper RIS and/or Receiver RIS click on the Load button to import the data into the Transfer Series window.

If you know the specific Transfer Number or Fiscal Year for a given transfer, you can enter that information in the Transfer Number and Fiscal Year windows. To generate the data, click on the Load button to populate the grids. The grids left of the data query section of the window will populate with the data pertaining to the Series ID, Shipper RIS, Receiver RIS, Transfer Number, and Fiscal Year.

Once the data is populated in the fields, select the record that you want to view or edit from the Transfer Series section. The row that is selected will be highlighted. If no row is selected or highlighted, the program will default to the first row of records from the Transfer Series section. The Header section is a child dependant to the first grid of Transfer Series data and is recognized as the Lower Grid. All of the column fields in the Header section that are highlighted blue can be edited.

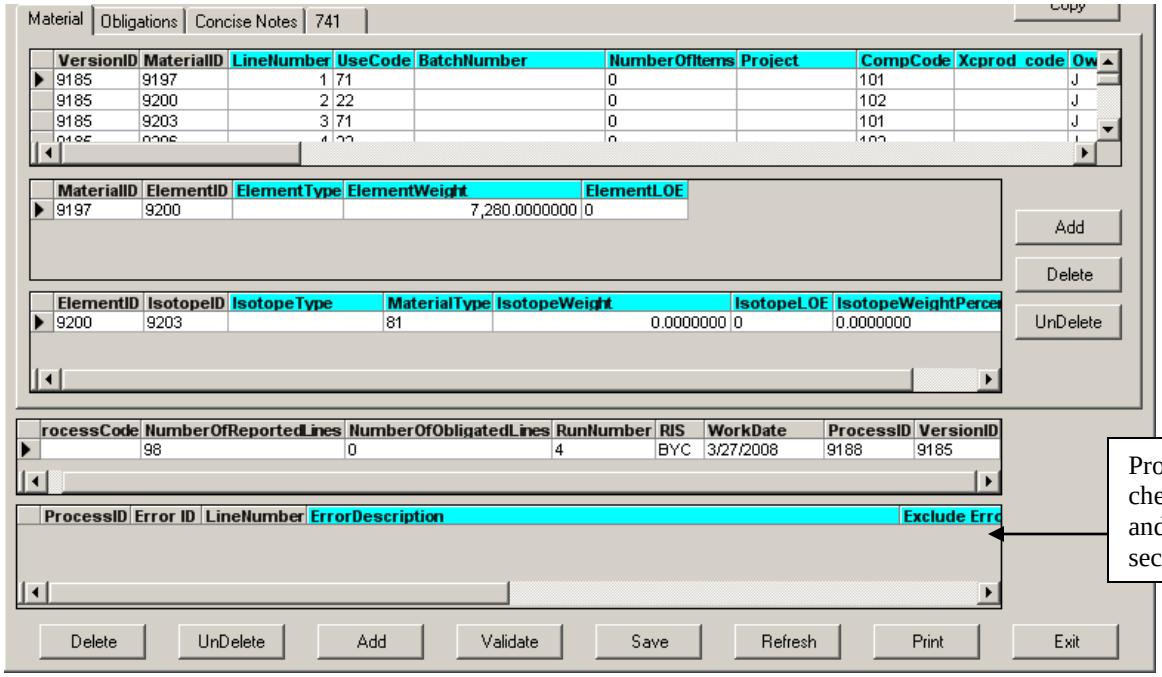
The Materials, Obligation, Concise Notes, and 741 Data tabs all have a child dependant relationship to the Header section. They are also recognized as the Lower Grid. The screen view below shows an example of the information and column headers pertaining to the Materials tab with the other tabs positioned in the background. To edit the other tabs just click the desired tab. All of the column headings associated with these tabs that are highlighted can be edited or updated. To edit data, click on the desired column field and record. When you need to add, delete, undelete, validate, save, refresh, copy, print or exit records utilize the key buttons located at the bottom and right of the grids.



Once the data is populated in the grids, select the record that you want to view. The row that is selected will be highlighted. If no row is selected or highlighted and the Header section is selected, the program will default to the first row of records from the above grid. The Header section is a child dependant to the first grid of data above and is recognized as the Lower Grid. All of the column fields with a blue Header tab can be edited or updated.

The Materials, Obligation, Concise Notes, and 741 Data tabs all have a child dependant relationship to the Header section above. They are also recognized as the Lower Grid.

The screen view below shows an example of the information and column headers pertaining to the Materials tab with the other tabs positioned in the background. To view the other tabs just click the desired tab. All of the column headings associated with these tabs that are highlighted can be edited or updated.



To add new records manually the user must select the Add button on the bottom of the screen. This will start a new Transaction series by adding a blank row to the bottom of the upper grid. After the transaction series information is entered for the new records then the user can use the Add buttons to the right of the Header and Detail line grids to add addition rows as needed dependent on the amount of data to be manually entered.

Any data entered into the screen is not added into the database until the Save button is selected.

The very bottom of the Edit Transactions window will display the results of the most current process run that has been conducted. If a transaction record has any edit check errors, they will be displayed on the screen in this location. If the user wants to override an edit check error, they have the option to exclude the error from being included in future process runs. This section will also display when data being adjusted no longer has errors.

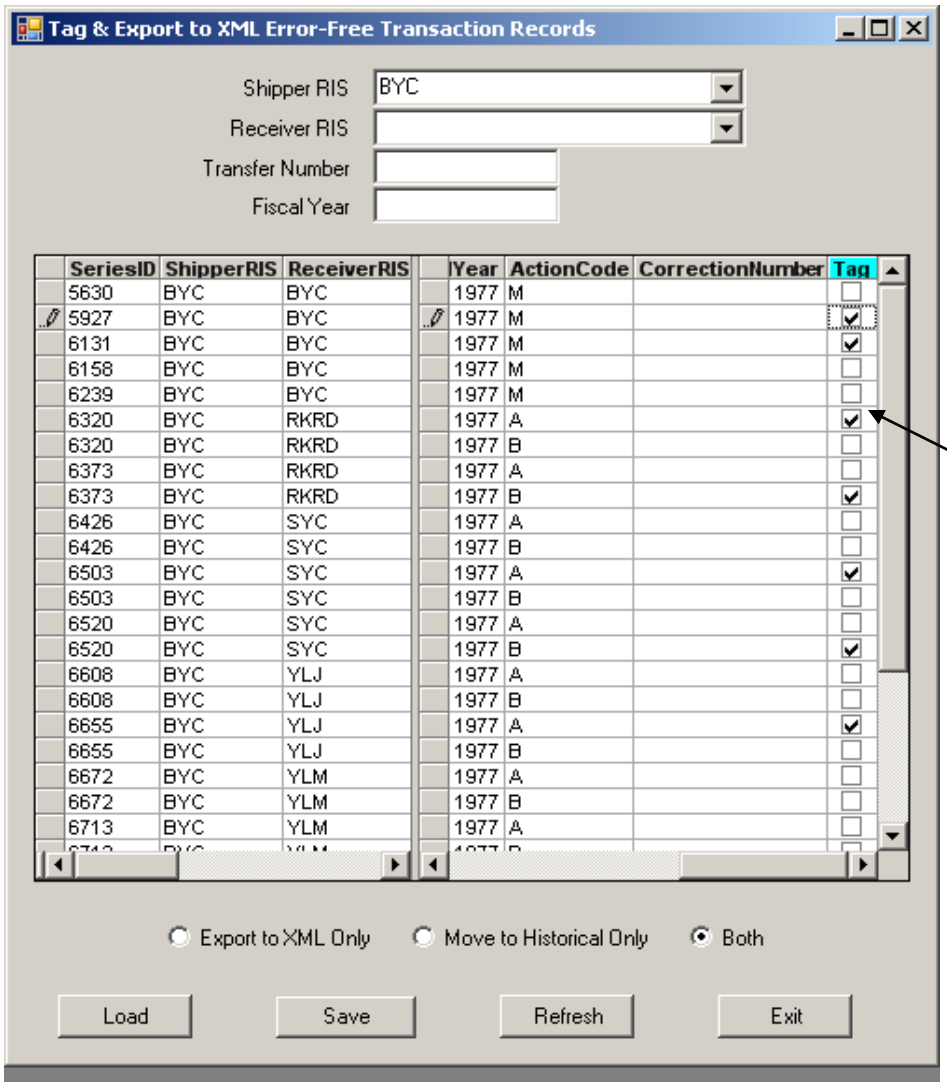
NOTE: If any records are manually added or adjusted under the Transaction Edit screen function then the data is saved to the database, however, the data has not been reprocessed through the edit check function within SAMS yet. The Validate button does verify if there are any errors with the changes but the errors are not saved. The user will need to conduct another process run for the changes to be edit checked and the results updated within the database.

B. Export Error-Free Transactions to XML

Export Error-Free Transactions contains data without edit check errors or data with errors that have been overridden (e.g.: excluded). The data can be exported to NMMSS using XML, and/or moved to the Historical files at the same time.

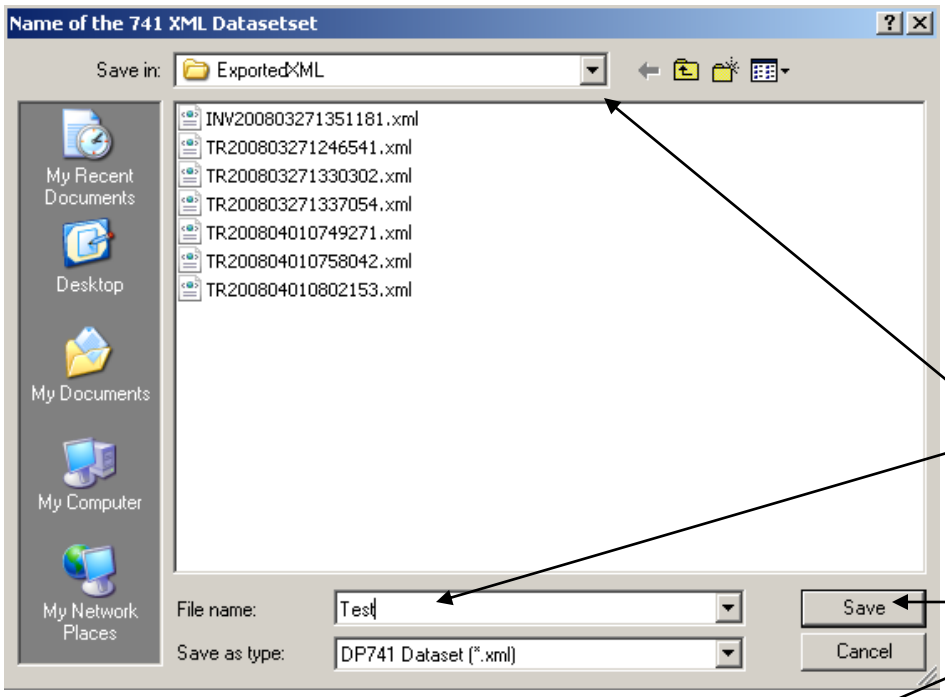
The Tag and Export to XML Error-Free Transaction Records screen below shows how the transaction data can be loaded by selecting the Shipper/Receiver RIS, Transfer Number and Fiscal Year information, and then clicking on the load button to generate the data.

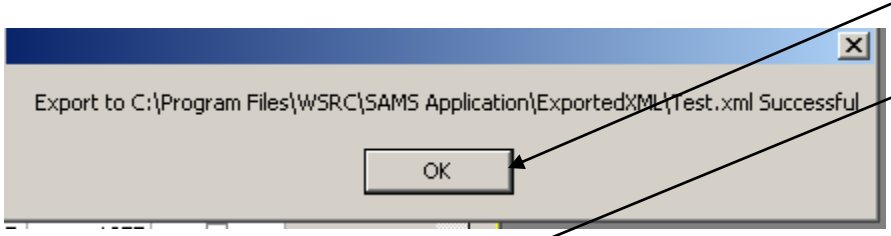
Once the data is populated place a check mark in the Tag boxes for the transactions to be Exported to XML only, moved to Historical only, or perform Both actions at the same time by selecting the save button.

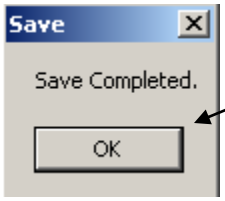


Click inside the Tag box to place a check mark for the transactions that will be exported only, moved to historical, or both, then select the Save button to complete the action.

Once the Save button is selected and either the "Export to XML Only" radio button, or the "Both" radio button is selected you will be asked to save the 741 XML Dataset (see example below). However, if you select the "Move to Historical Only" radio button you will receive the Save Completed Ok message.







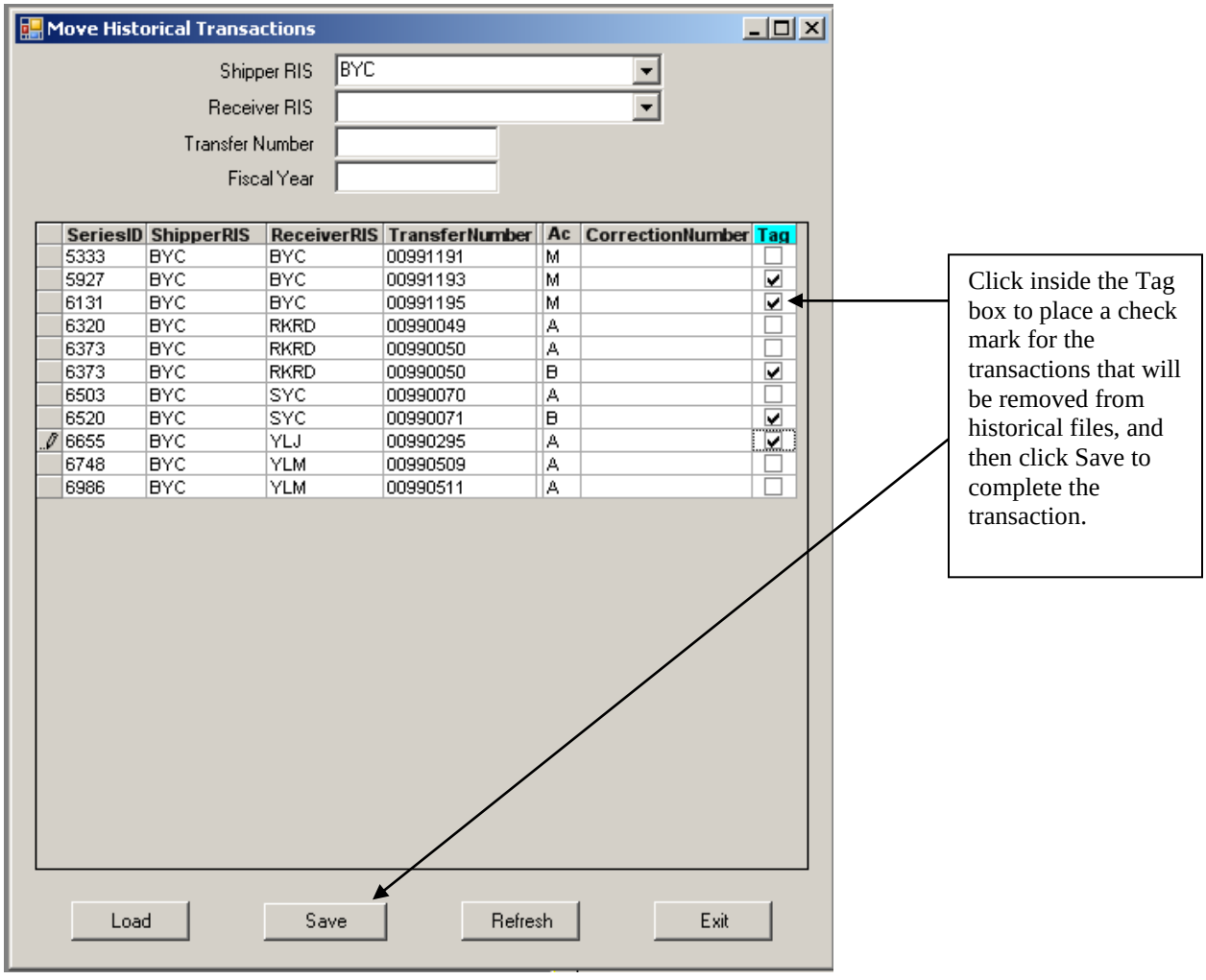
Example concerning Exporting and saving 741 XML Dataset.

1. Provide file name and identify where to save file
2. Click save
3. Click Ok for the file address
4. Click Ok for Save Completed

C. Move Transaction Records from Historical

The Move Transaction Records from Historical screen allows the user to reassign a transaction record that has been placed into historical back to active. The screen below shows how the transaction data can be queried and loaded by selecting the Shipper/Receiver RIS, Transfer Number and Fiscal Year information; and then clicking on the load button to generate the data. If desired the user can leave the drop down windows blank and click the Load button to call up all historical records.

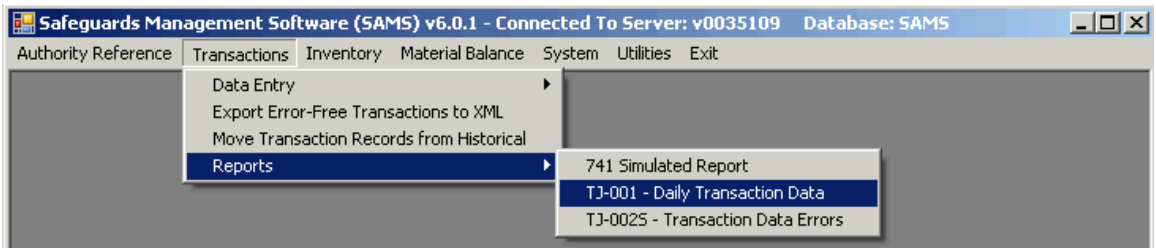
Once the historical data is populated, place a check mark in the Tag box for the transactions that need to be removed from the historical transaction files, and then select the Save button. There should appear a Save Completed Ok message immediately after.



D. Transactions Reports

The SAMS Transactions Reports consist of the 741 Simulated Report, the TJ-001 – Daily Transaction Data report, and the TJ-002S – Transaction Data Errors report.

To access a report, select the Transactions and Report submenu option, then select the desired report that you want to run.



Note: Internet Explorer provides the user the option to allow or not allow Active Content updates when displaying reports. The user needs to ensure that the SAMS system is set to allow active content updates or the XML report formats will not be correct and the printed or viewed report will be shifted.

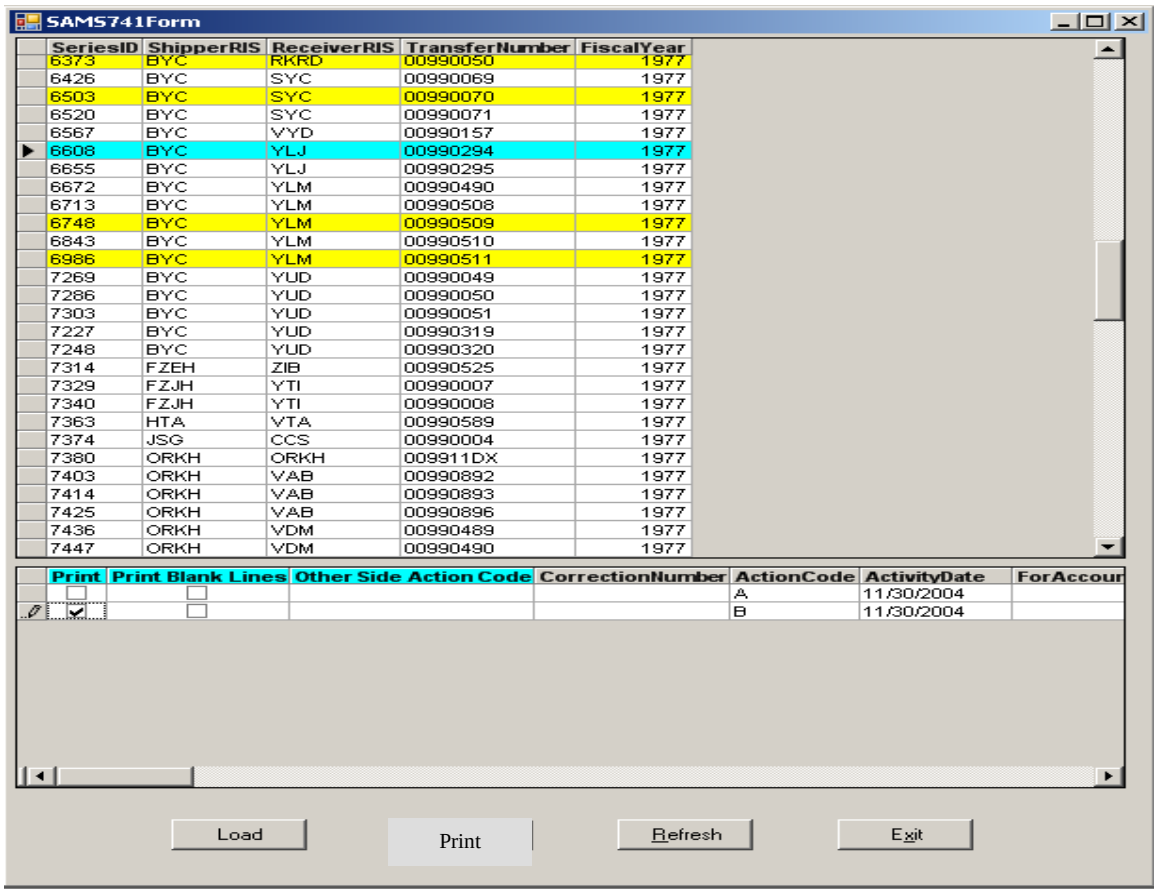
1. 741 Simulated Report

The 741 Simulated Report menu option allows the application user to generate a transaction report in the DOE/NRC Form 741 format.

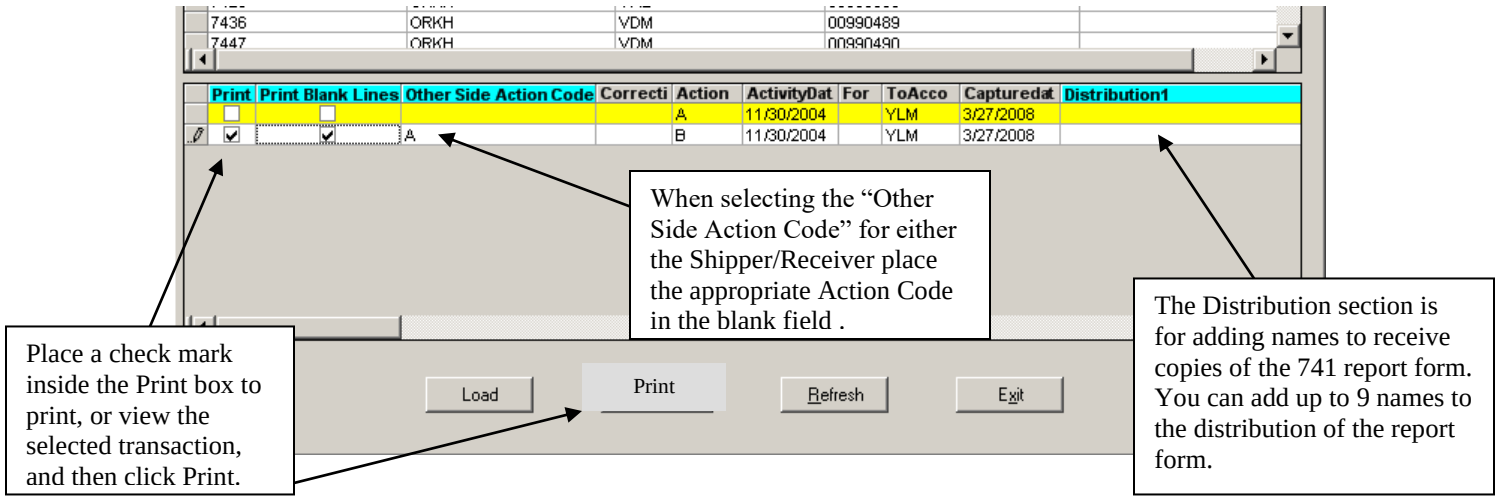
The 741 Simulated Report screen below shows an example view of all the transactions in the SAMS system. To generate the list of the current and historical transactions the user must click on the Load button. The Series ID, Shipper RIS, Receiver RIS, Transfer Number, and Fiscal Year information for all the transactions will appear. The upper section if the screen displays the transaction series only. Once a series is selected, the lower section will display all action codes associated with that series.

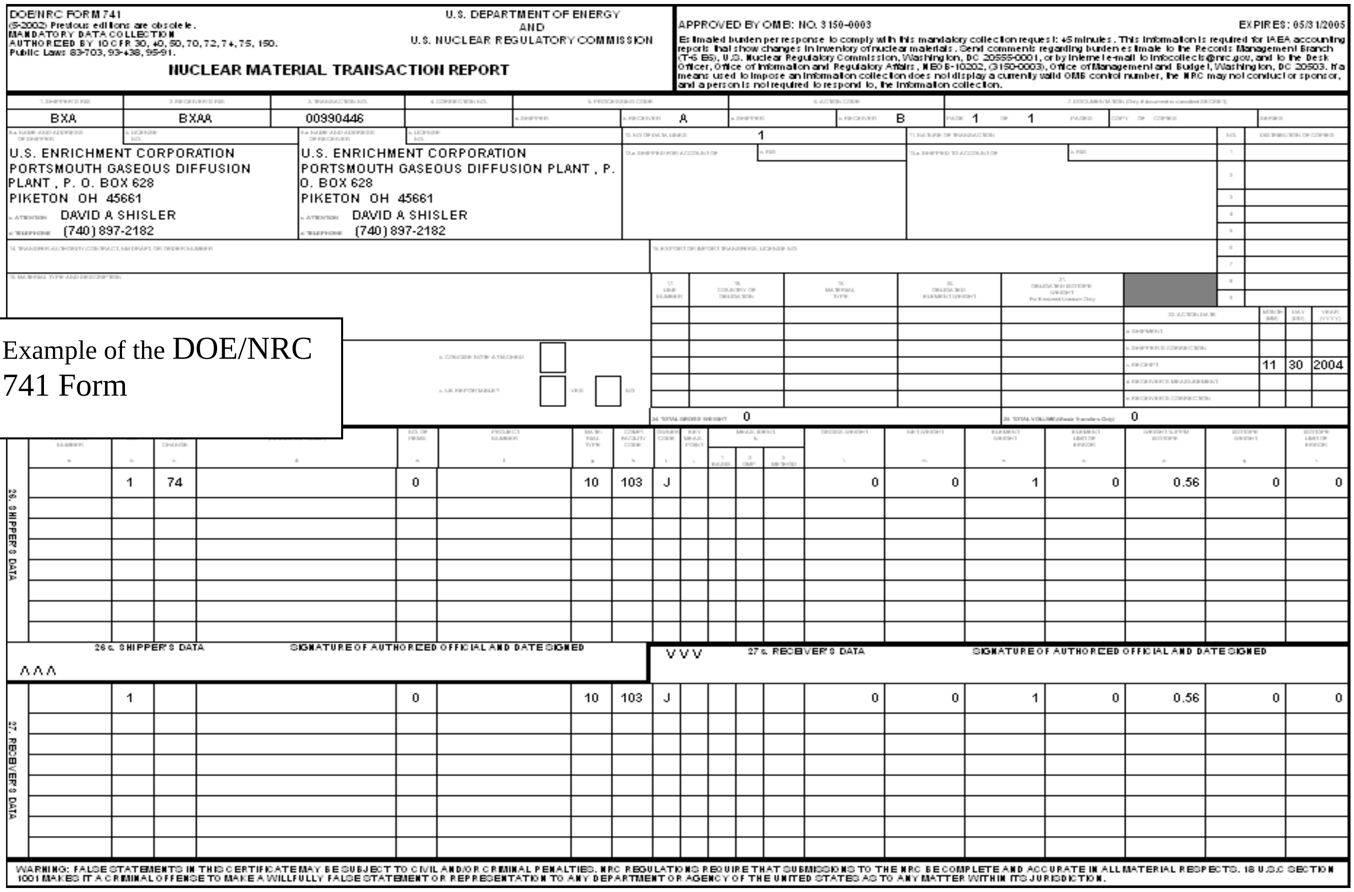
Transactions that appear highlighted as yellow are historical transactions, and they can not be edited, or accessed in the 741 Simulated report. However, all other transactions can be viewed and printed through the report function.

Once the transactions are populated in the screen, click on the transactions to view through the DOE/NRC 741 form. Place a check mark in the Print box and click on the Print button to generate the 741 report form. The 741 report form will automatically open into Microsoft Internet Explorer and will save the report in its designated file location. To print the 741 form, select the Internet Explorer File menu and print.



Note: When selecting transactions to view and print for the 741 Simulated report function there are several options to select from such as, Print, Print Blank Lines, Other Side Action Code, and Distribution list (see example of 741 report form below).





DOE/NRC FORM 741
(5-2002) Previous editions are obsolete.
MANDATORY DATA COLLECTION
AUTHORIZED BY 10 CFR 30, 40, 50, 70, 72, 74, 75, 150.
Public Laws 83-703, 93-438, 95-91.

U.S. DEPARTMENT OF ENERGY
AND
U.S. NUCLEAR REGULATORY COMMISSION

NUCLEAR MATERIAL TRANSACTION REPORT

APPROVED BY OMB: NO. 3150-0003 EXPIRES: 05/31/2005

Estimated burden per response to comply with this mandatory collection request: 45 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

BXA | BXAA | 00990446 | Receiver A | Receiver B | Page 1 of 1

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1

11 30 2004

0 0

26. SHIPPER'S DATA

	1	74		0		10	103	J					0	0	1	0	0.56	0	0

26c. SHIPPER'S DATA SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED
AAA

VVV 27c. RECEIVER'S DATA SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

27. RECEIVER'S DATA

	1			0		10	103	J					0	0	1	0	0.56	0	0

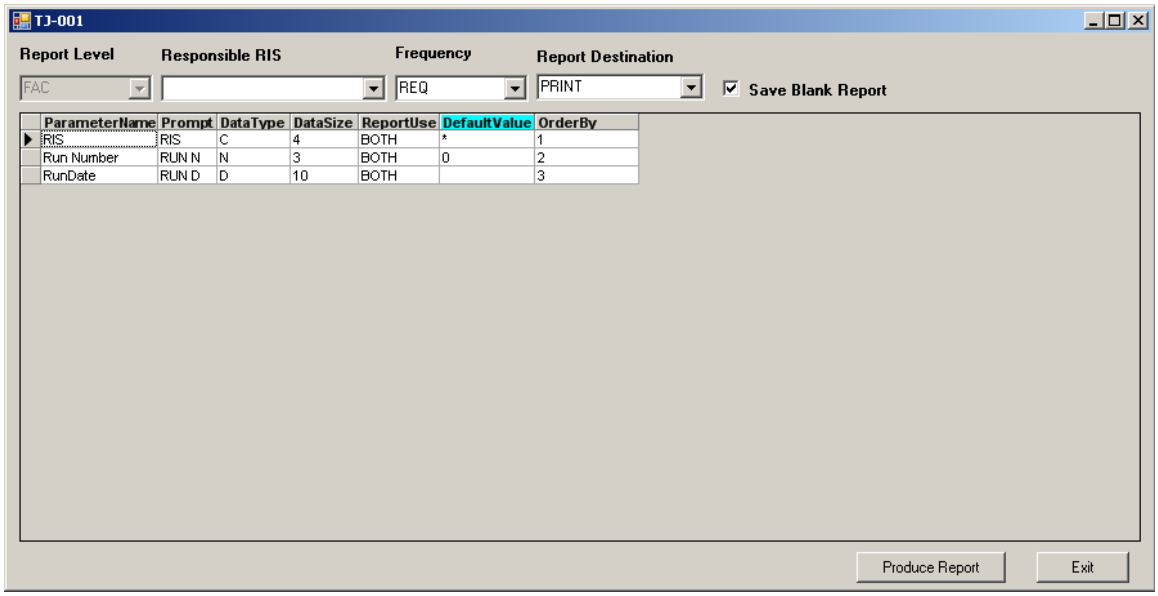
WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECTS. 18 U.S.C SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION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

Example of the DOE/NRC 741 Form

2. TJ-001 – Daily Transaction Data

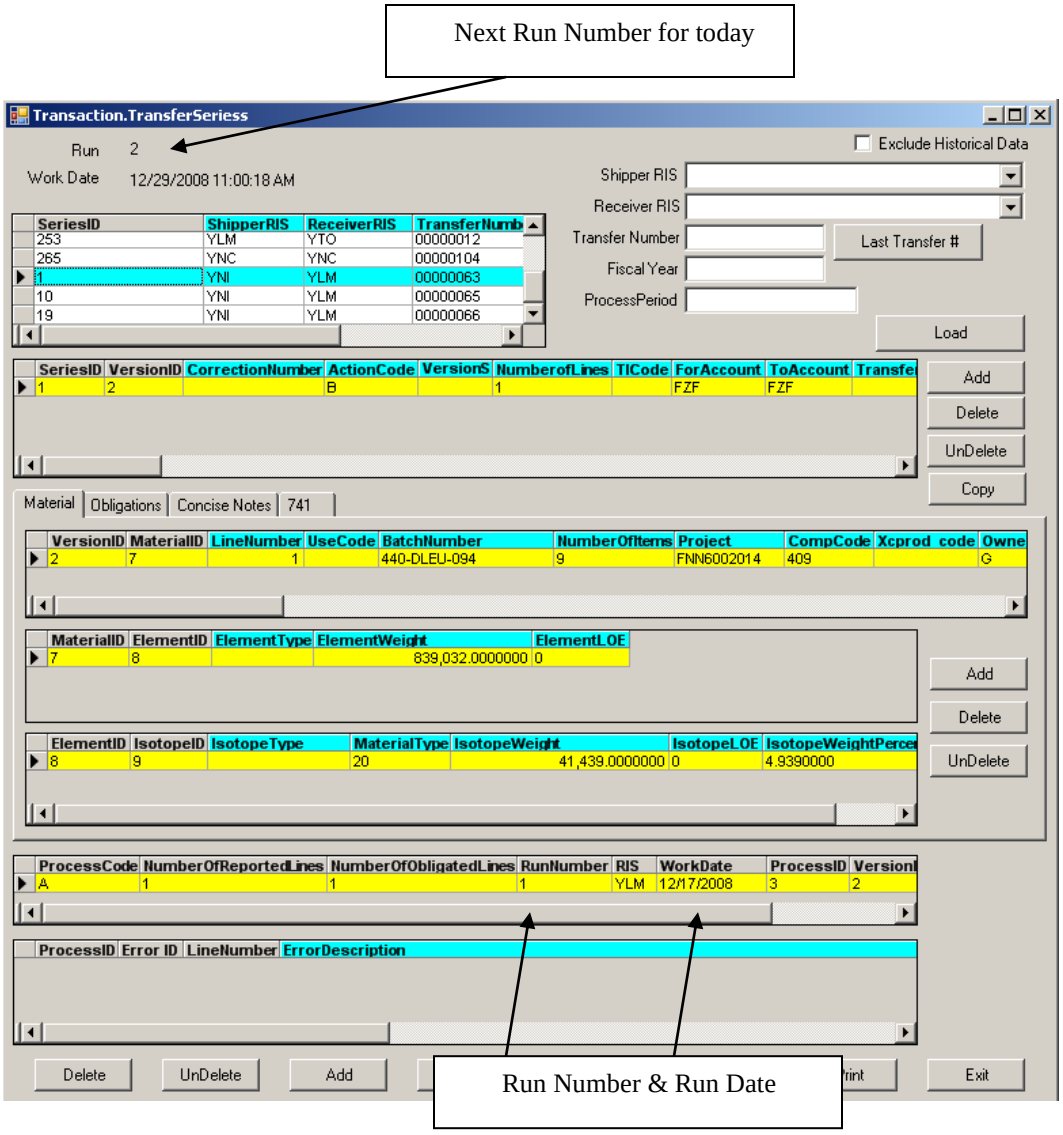
The TJ-001 – Daily Transaction Data report allows the user to display transactions that have been entered into the application based the input for a give daily run.

Once the report processing screen appears, there are several options that are available for selecting information to run a report. These options consist of several dropdown options in the screen header for Report Level, Responsible RIS, Frequency and Report Destination. In the lower columns the user has the option to enter the RIS, Run number and Run Date. It is recommended that the user always enter a RIS into the Responsible RIS and lower RIS parameters. This way the application does not attempt to pull all of the open RIS transactions in the entire SAMS database. It is also recommended that the Run Number be left at zero (0) and the Run Date be left Blank. This way all of the open (non-historical) transactions will be displayed on the report.



If the user only wants the information that they have just entered into the system then they can enter the Run Number and Run Date into the report filters in the lower section of the report generation screen.

The Run Number and Run Date are also located at the bottom of the Transaction Edit screen. The top of the Transaction Edit screen displays what the next process run number would be on a given day. This is the information that the user would enter into the TJ-001 report filters if desired.



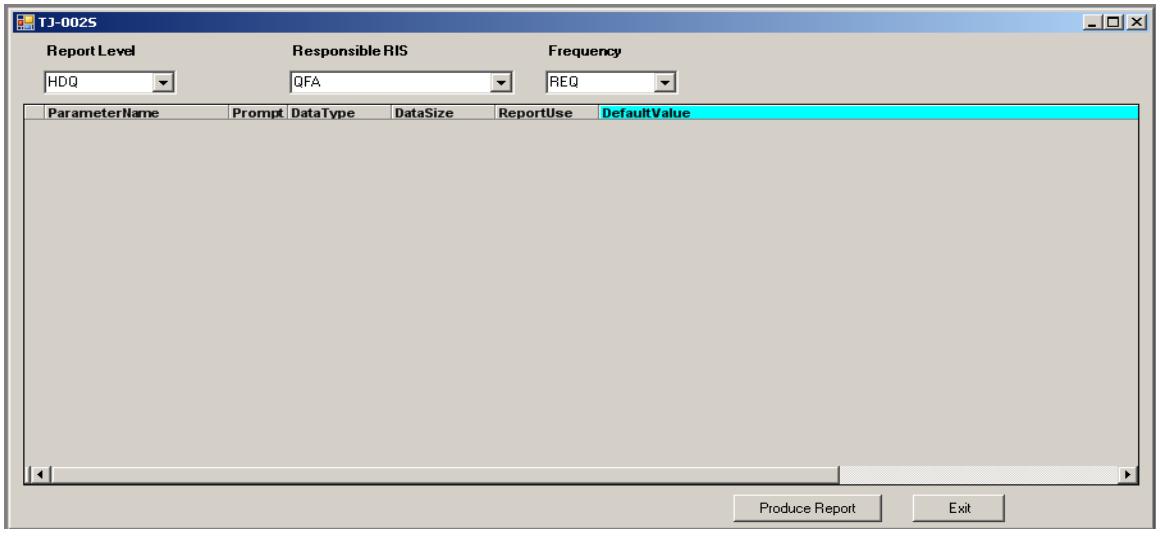
To generate a report, click on the Produce Report button. The report will automatically open into Microsoft Internet Explorer and will save the report in its designated file location. To print the report, select the Internet Explorer File menu and print.

3. TJ-002S – Transaction Data Errors

The TJ-002S report is a SAMS specific report that lists out the errors that have been identified for NMMSS transactions that have been entered into the system and processed through a daily run.

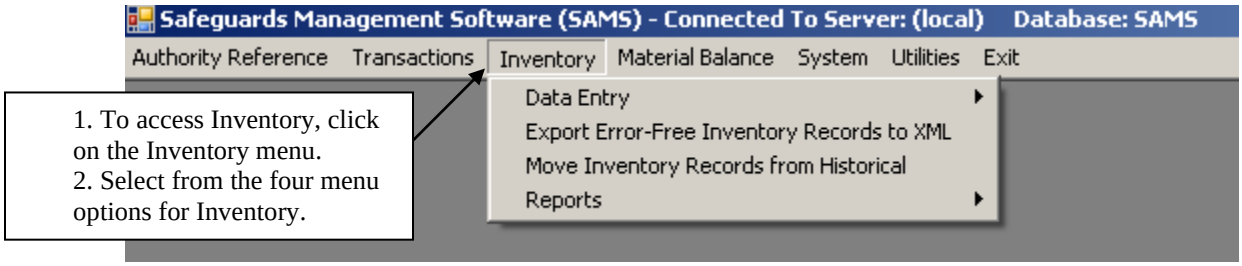
Once the TJ-002S report screen appears, the only section available for selecting information to run is through the drop down header menu for Report Level, Responsible RIS, Frequency and the lower column grid for Default Value. See example of the TJ-002S Report screen below.

To generate a report, click on the Produce Report button, ensure you have selected the correct criteria in the drop down header menu and the default value field. The report will automatically open into Microsoft Internet Explorer and will save the report in its designated file location. To print the report, select the Internet Explorer File menu and print.



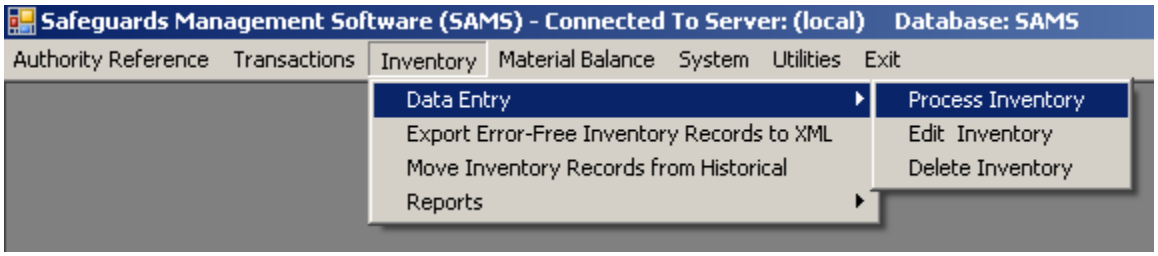
X. Inventory

The SAMS Inventory menu function has four options that the user can select from. These options are Data Entry, Export Error-Free Inventory Records to XML, Move Inventory Records from Historical, and Reports



A. Data Entry Inventory

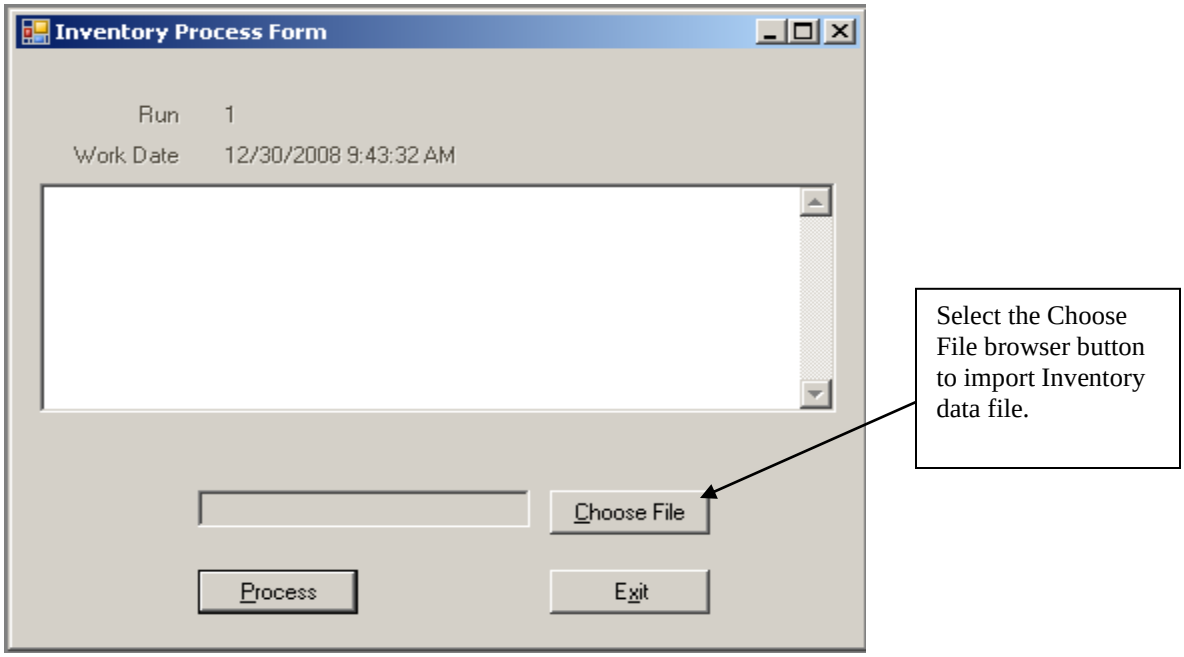
When the Data Entry is selected a submenu of three inventory options are available to the system user. They are Data Entry/Process Inventory, Edit Inventory, and Delete Inventory.



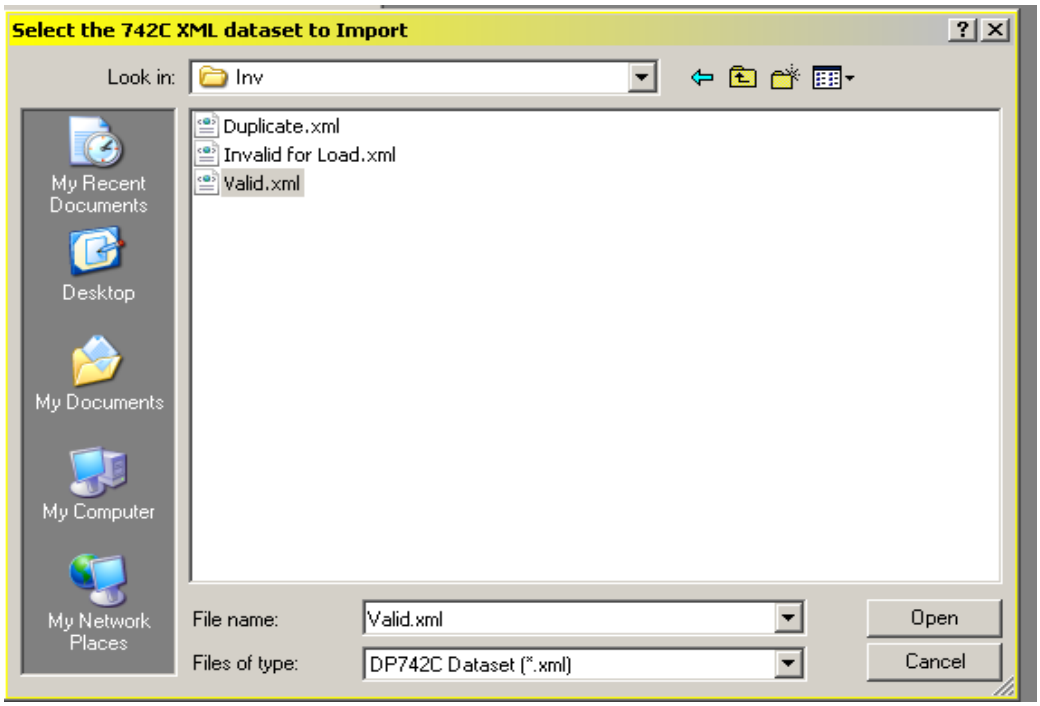
1. Process Inventory

The Data Entry menu option for Process Inventory opens the screen view in which data is processed and edit checked. For the process inventory function, the following screen will appear concerning processing inventory data. This function is used to import inventory data into SAMS.

When importing data, the screen below provides a Choose File browser button for selecting the data file to import.

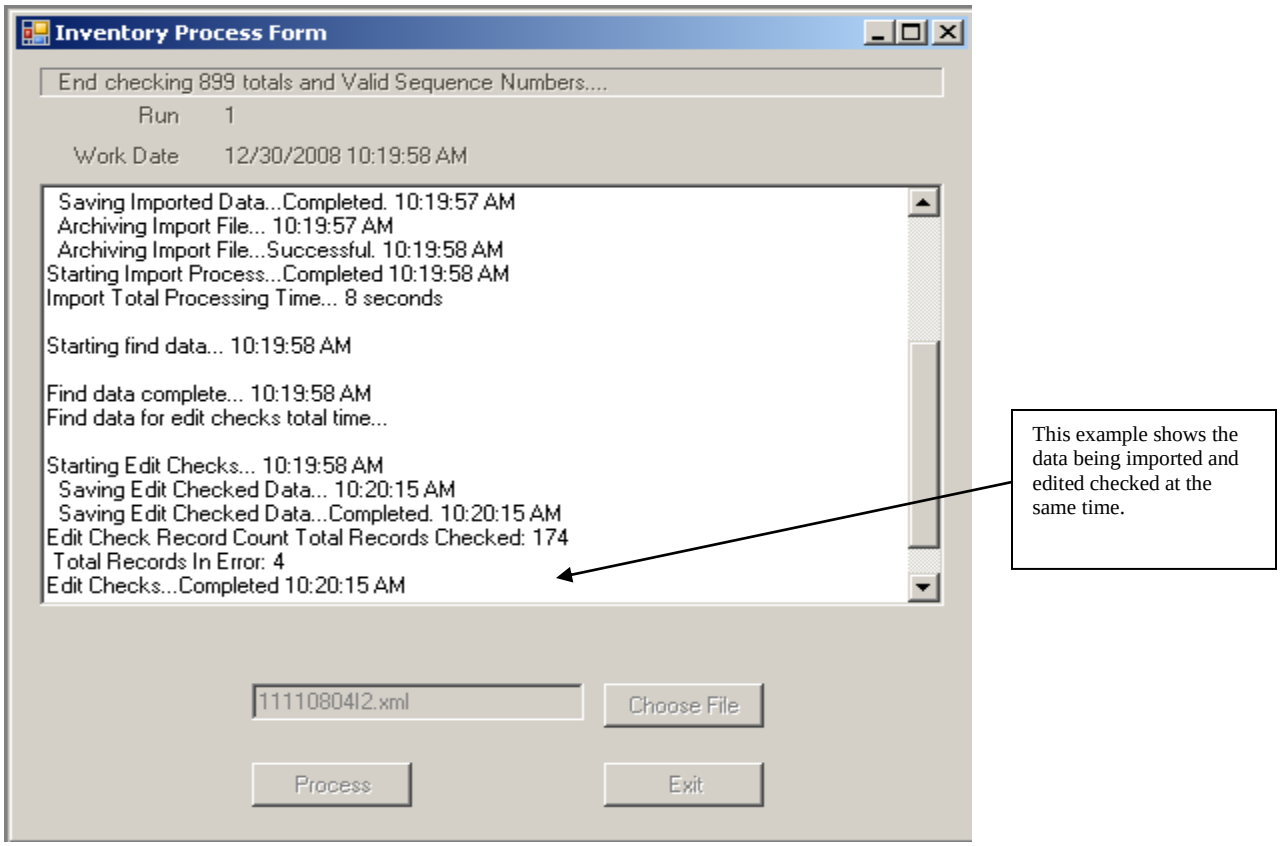


To import inventory XML datasets, click on the Choose File browser button from the inventory import screen and select the XML data file to be imported. The XML Dataset to Import file location screen will automatically display. Select the dataset to be imported by selecting it and then clicking on the open button.



Once the data file is selected and it appears in the Choose File window, click on the Process button to execute the data file import.

The inventory import process will automatically start processing the data, and saving each record associated with the dataset. A message will appear in the Import window indicating the import is complete (see example below of the inventory Import process screen). You can scroll up and down the import window as the run is occurring to view the results.

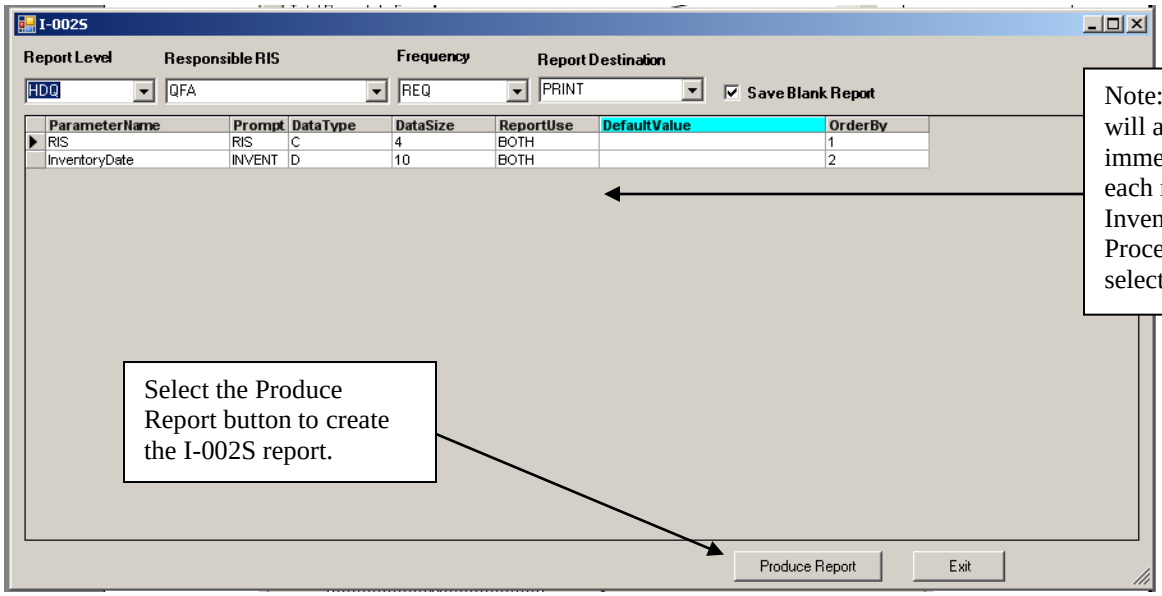


Immediately after the process import is complete, the I-002S Inventory Error Report screen will display for producing the error report. If there are more data files to import just click on the Exit button on the I-002S and repeat the inventory import process.

If there are more inventory datasets to be imported, repeat the Inventory import process. However, the Produce I-002S Report screen will appear for producing the I-002S report immediately after each process run (see example below of the I-002S produce report screen).

Note: Once the I-002S Produce Report button is selected it will automatically open into Microsoft Internet Explorer for viewing and will save the report in its designated file location. To print the report, select the Internet Explorer File menu and print.

Select the Exit button on the Produce I-002S Report screen and return to the Inventory Import screen to process more XML datasets.

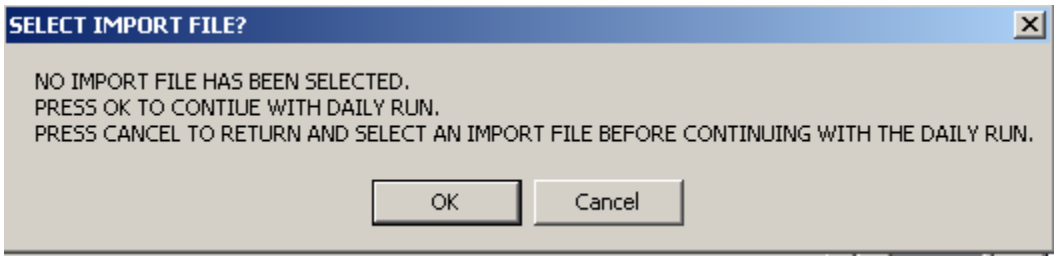


Note that if an I-002S Inventory Error report is generated with a No Data designation on page 2 of the report then there were no errors associated with the process run being conducted.

2. Run Inventory Edit checks only

If new inventory data has been manually entered or existing data has been manually adjusted, the user **must** re-run the NMMSS Edit Check process using the Inventory Processing form by selecting the Process button without selecting a file to be imported.

A window will appear noting that no file has been selected and give the user the option to continue with the processing run (edit checks) or cancel and start over with the file selection process to import information.

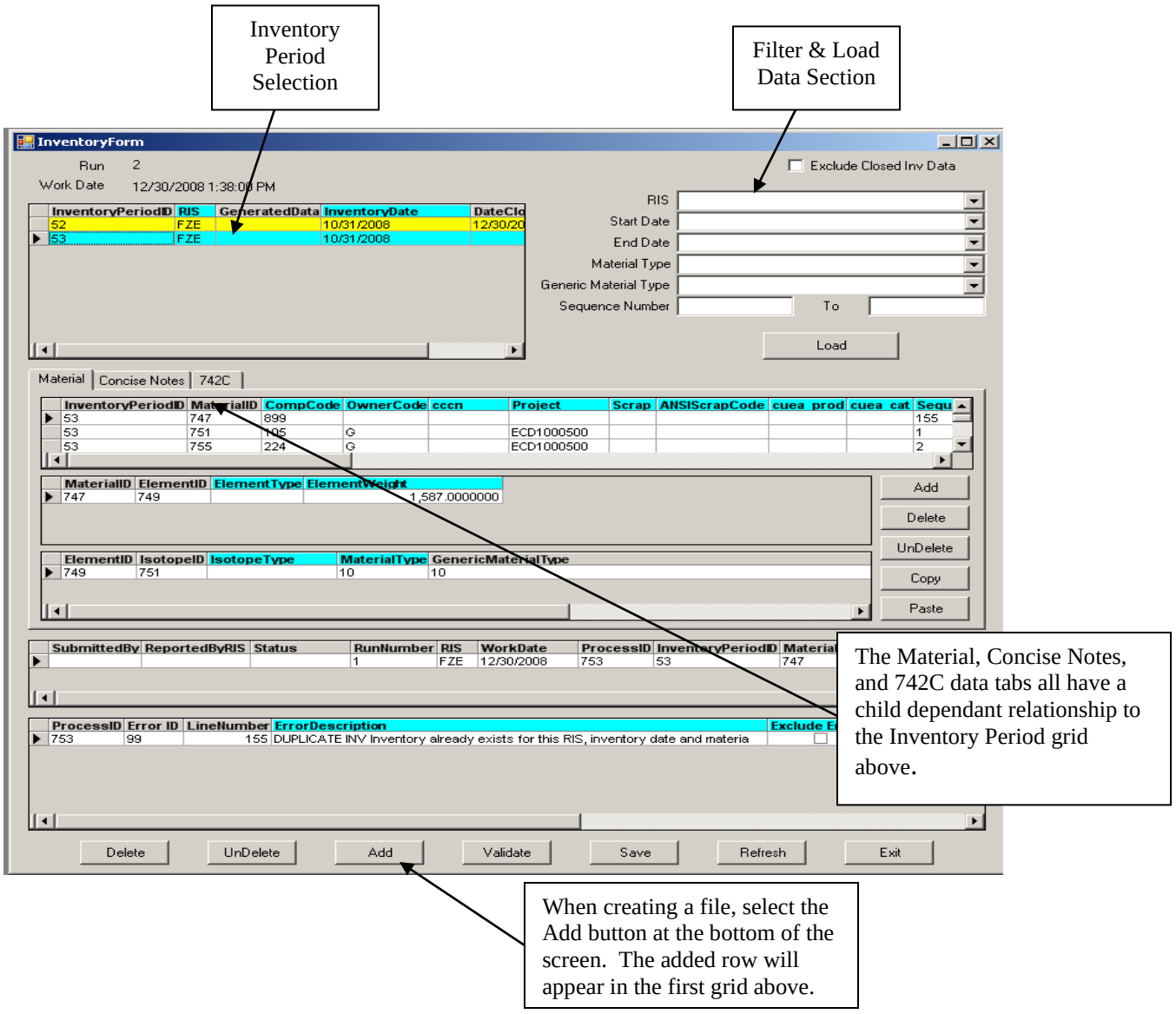


3. Edit Inventory

The Edit Inventory option allows the user to view previously imported data loaded through the Process Inventory function or manually enter inventory data into the system. To view existing data, the user must query the application to pull up the required records. In performing the Edit Inventory function, you have the option of selecting the load button to generate the inventory records, or you may add / manually input the inventory record data in the various fields to be processed.

The Edit Inventory screen is divided into several sections as followed:
1. Filter and load data records section
2. Edit Inventory window
3. Material, Concise Notes, and 742C data
4. Process Detail information

Note: Column headings that are highlighted (Blue) can be edited. Once changes are made to a file, that particular file will gray out in the grid.



The first portion of the screen display (upper right) provides drop down menu options to select the RIS and inventory data related to what is desired to be retrieved. This is known as the Query selection section. After selecting the inventory period RIS the user must also enter a data range of the inventory period desired. If a Start date and End Date is not entered into the Query option, then no data will be retrieved and displayed. The user also has the option to include additional filters related to the Material Type, Generic Material Type, or Sequence Number ranges to further filter the data being called up.

Once the desired filters are entered the user must select the Load button for the information to be retrieved from the database and displayed on the screen. To view

historical inventory data, click inside the box to remove the check mark from the Exclude Closed Inventory Data box.

Note: Data rows that are highlighted yellow in the table grids are considered historical or closed data which cannot be modify even though the column headings are highlighted blue.

Once the data is populated in the fields, select the record that you want to view or edit from the Inventory Period section. The row that is selected will be highlighted. If no row is selected or highlighted, the program will default to the first row of records from the Inventory Period section. The Material, Concise Notes, and 742C section is a child dependent to the first grid of Inventory Period data and is recognized as the Lower Grid. All of the column fields in the Inventory Edit screen that are highlighted blue can be edited.

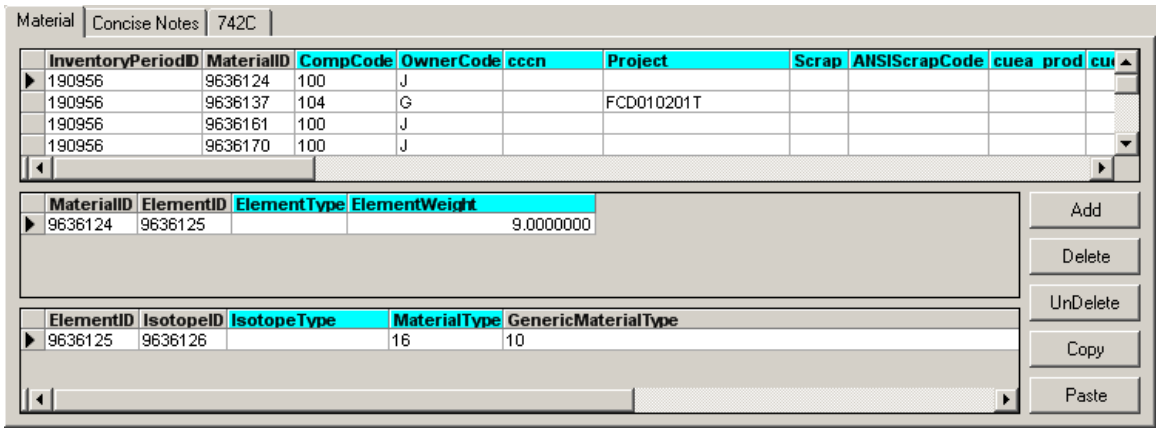
To add new records manually the user must select the Add button on the bottom of the screen. This will start a new Inventory Period series by adding a blank row to the bottom of the upper grid. After the Inventory Period information is entered for the new records then the user can use the Add button to the right of the Material grids to add addition detail rows as needed dependent on the amount of data to be manually entered.

Any data entered into the screen is not added into the database until the Save button is selected. The Edit Inventory screen will automatically refresh once the data is saved.

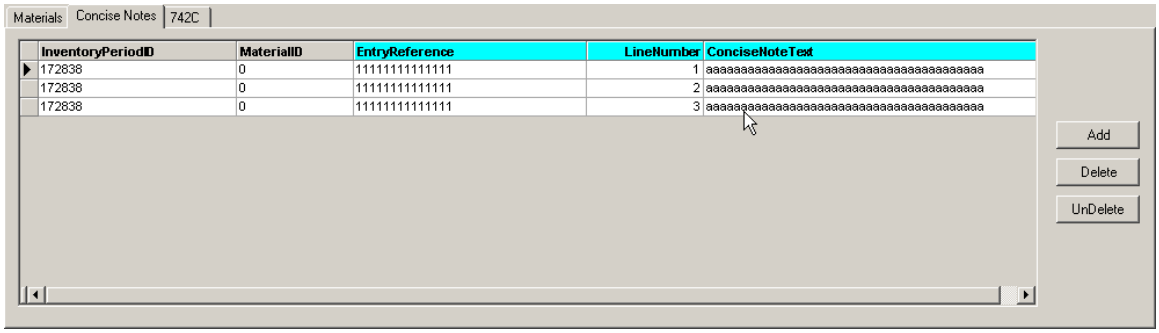
There are three Edit Inventory tabs: Material, Concise Notes, and 742C associated with the Inventory Edit screen. Below are screen view examples of each tab and the various column headings of information related to that particular tab.

To edit data within a tab, just click on the desired tab. All column headings associated with the tabs that are highlighted can be edited or updated. To edit data, click on the desired record and column field. When you need to add, delete, undelete, validate, save, refresh, or exit records, utilize the key buttons located at the bottom of the screen. Also, when adding a new file use the add button at the bottom of the screen. The added row will appear in the Edit Inventory window. When modifying information for the Material, Concise Notes, and 742C tabs utilize the side buttons (Add, Delete, Undelete, Copy and Paste).

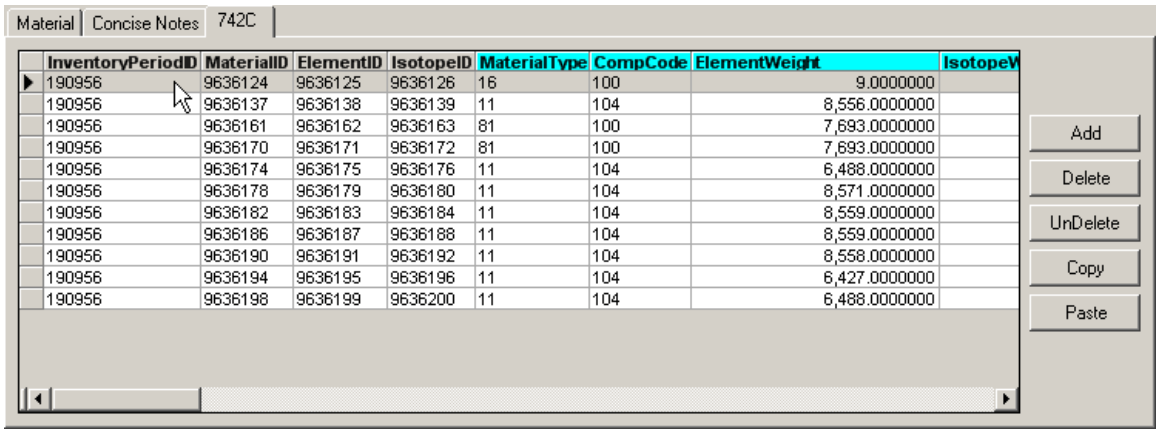
Edit Inventory Material Tab



Edit Inventory Concise Notes Tab



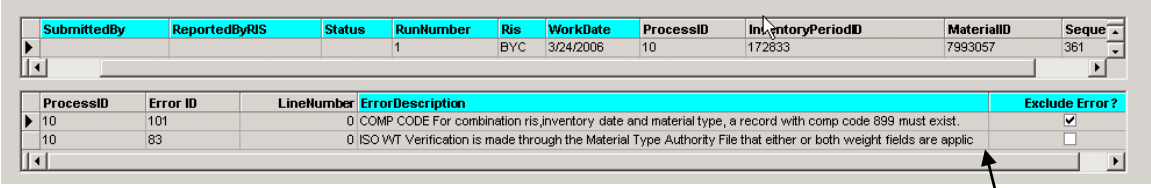
Edit Inventory 742C Tab



Inventory Process Detail

The very bottom of the Edit Inventory window will display the results of the most current process run that has been conducted. If an inventory record has any edit check errors, they will be displayed on the screen in this location. The process detail section provides information concerning the Process ID, Error ID, Line Numbers, Error Description and Exclude Error option, etc.

If the user wants to override an edit check error they have the option to exclude the error from being included in future process runs. This section will also display when data being adjusted no longer has errors.



SubmittedBy	ReportedByRIS	Status	RunNumber	Ris	WorkDate	ProcessID	InventoryPeriodID	MaterialID	Seque
			1	BYC	3/24/2006	10	172833	7993057	361

ProcessID	Error ID	LineNumber	ErrorDescription	Exclude Error?
10	101	0	COMP CODE For combination ris,inventory date and material type, a record with comp code 899 must exist.	☑
10	83	0	ISO WT Verification is made through the Material Type Authority File that either or both weight fields are applic	☐

The process detail section provides information concerning the inventory error description and it allows the option of checking the exclude error box to save the inventory with the error noted. This will also allow the inventory to be closed / moved to historical file with the error noted. However, each time the opened inventory is processed, the error should be noted in the error description.

NOTE: If any records are manually added or adjusted under the Inventory Edit screen function then the data is saved to the database, however, the data has not been reprocessed through the edit check function within SAMS yet. The Validate button does verify if there are any errors with the changes but the errors are not saved. The user will need to conduct another process run for the changes to be edit checked and the results updated within the database.

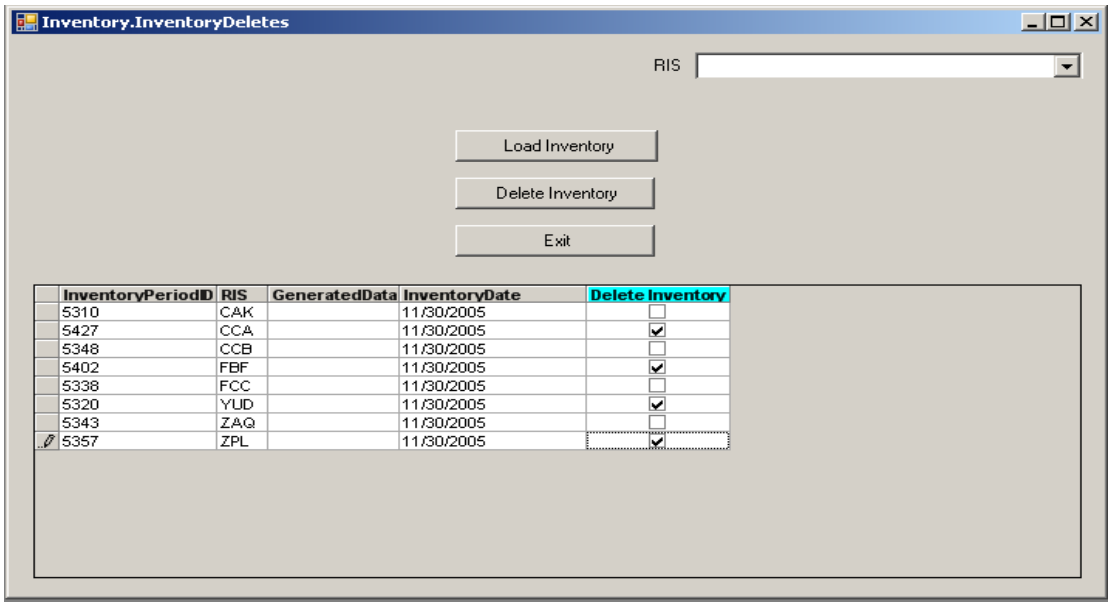
4. Delete Inventory

The Delete Inventory function will allow you to select several inventory records to delete at one time, or you can delete one inventory period record at a time. However, once a record is deleted it is removed from the system.

Select the RIS inventory to be deleted by typing the RIS name in the RIS query window, or clicking on the drop down and selecting from the list of valid RIS names. Once the RIS is selected, click on the Load Inventory button, or you may elect to filter all the RIS by leaving the RIS window blank and clicking on the Load Inventory button.

The inventory information concerning that particular RIS should appear in the lower grid window (Inventory Period ID, RIS, Generated Data, Inventory Date, and Delete Inventory). Click in the Delete Inventory box to place a check mark identifying the RIS's inventory period for deletion, then click on the Delete Inventory button to delete the inventory.

If you loaded all the RIS but only want to delete certain ones, place a check mark in the Delete Inventory boxes to delete. Once the RIS is deleted, the Delete Inventory screen will appear with a message indicating "Deletes Completed." The inventory selected for deletion will no longer appear in the Delete Inventory window.



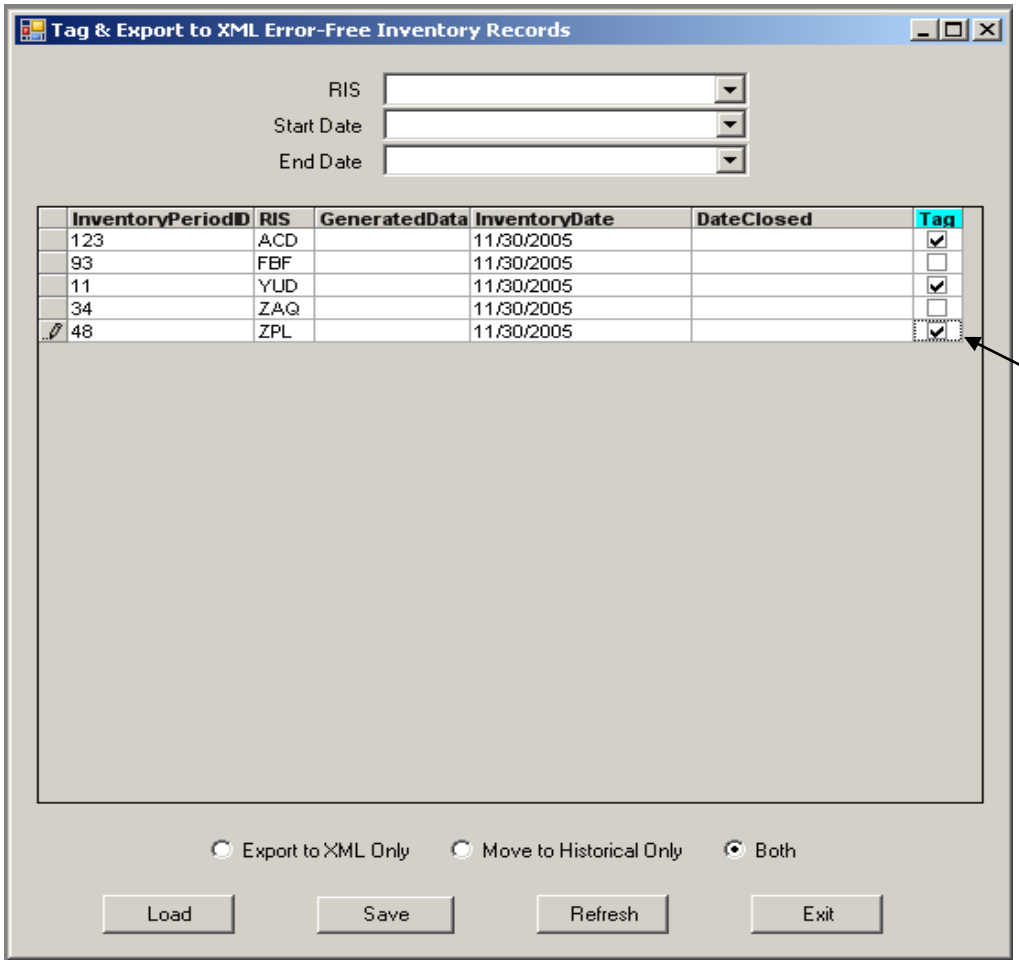
Not that the Inventory Delete screen option only allows the user to delete the entire inventory period. If the user desires to delete detail inventory information (lines of data within a given period) then they need to go to the Inventory Edit screen option.

B. Export Error-Free Inventory Records to XML

Export Error-Free Inventory Records contains data with no edit check errors or data with errors that have been overridden (e.g.: excluded). The data can be exported to NMMSS using XML, and/or moved to the Historical files at the same time.

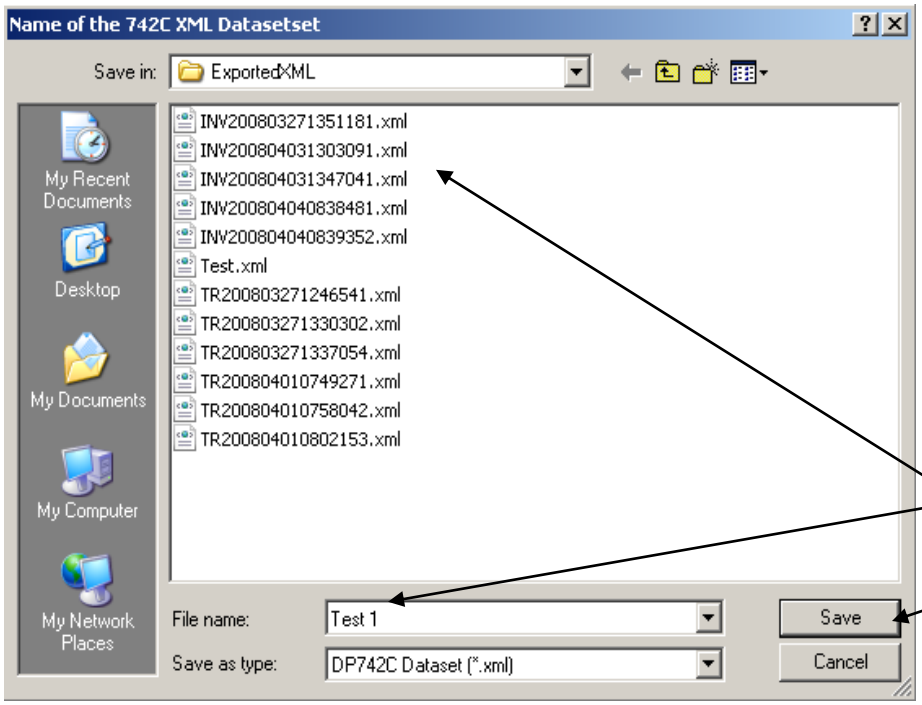
The tag and export to XML error-free inventory records screen below shows how the inventory data can be loaded by selecting the desired RIS along with the start date and end date range for the data to be retrieved, and then clicking on the load button to generate the data.

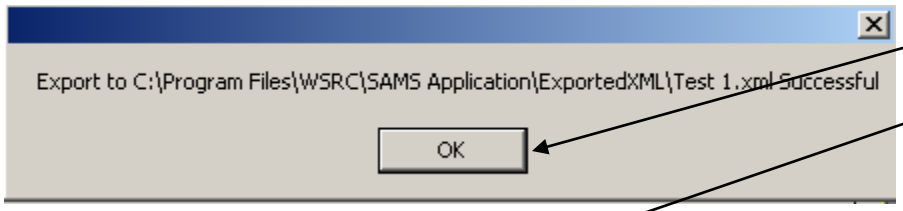
Once the data is populated place a check mark in the tag boxes for the inventory records to be exported to XML only, moved to historical only, or perform both actions at the same time by selecting the save button.

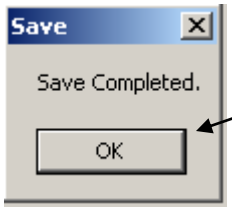


Click inside the Tag box to place a check mark for the inventory records that will be exported only, moved to historical, or both, then select the Save button to complete the action

Once the save button is selected and either the "Export to XML Only" radio button, or the "Both" radio button is selected you will be asked to save the 742C XML dataset (see example below). However, if you select the "Move to Historical Only" radio button you will receive the save completed ok message.







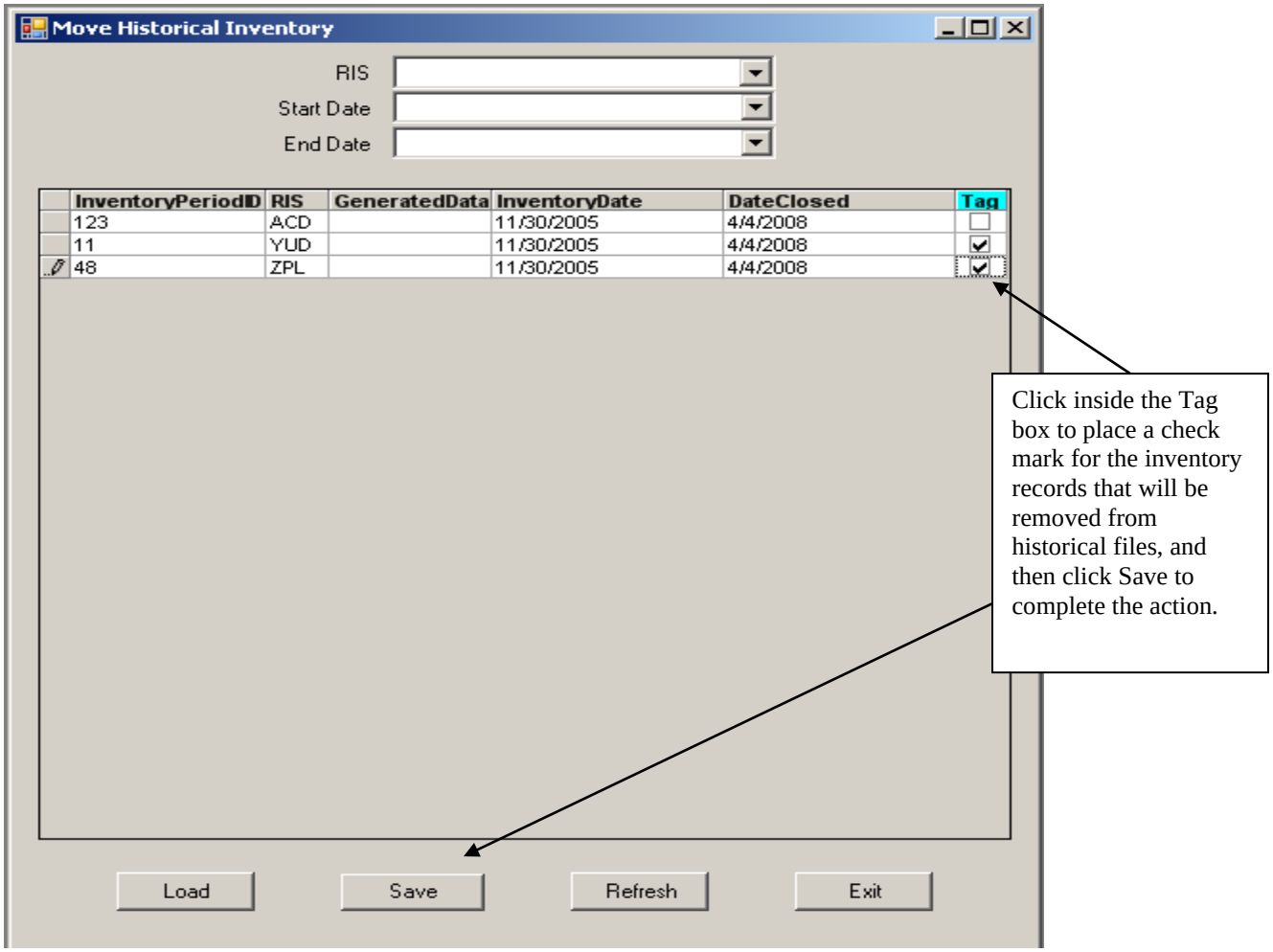
Example concerning Exporting and saving 742C XML Dataset.

1. Provide file name and identify where to save file
2. Click Save
3. Click Ok for the file address
4. Click Ok for Save Completed

C. Move Inventory Records from Historical

The Move Inventory Records from Historical screen allows the user to reassign an inventory record that has been placed into historical back to active. The screen below shows how the inventory data can be queried and loaded by selecting the RIS, Start Date and End Date information; and then clicking on the Load button to generate the data. If desired the user can leave the drop down windows blank and click the Load button to call up all historical records.

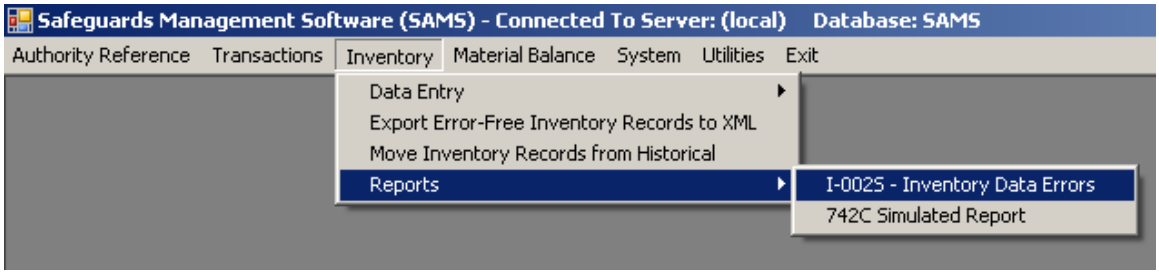
Once the historical data is populated, place a check mark in the Tag box for the inventory records that need to be removed from the historical inventory files, and then select the Save button. There should appear a save completed ok message immediately after.



D. Inventory Reports

The SAMS Inventory Reports are I-002S – Inventory Data Errors Report and 742C Simulated Report.

To access a report, click on Inventory and Reports submenu and then select the I-002S – Inventory Data Errors report, or the 742C Simulated Report.



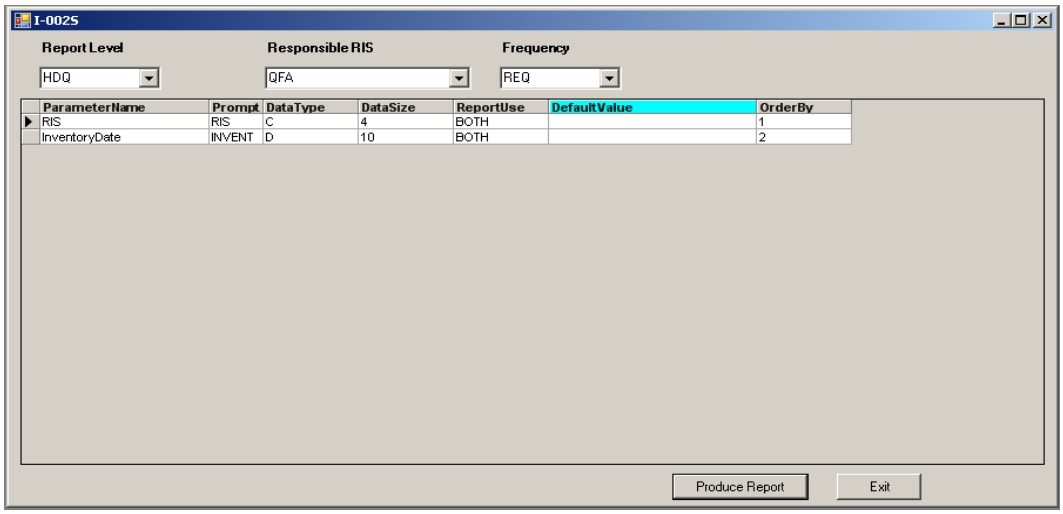
Note: Internet Explorer provides the user the option to allow or not allow Active Content updates when displaying reports. The user needs to ensure that the SAMS system is set to allow active content updates or the XML report formats will not be correct and the printed or viewed report will be shifted.

1. I-002S – Inventory Data Errors

The I-002S report is a SAMS specific report that lists out the errors that have been identified for NMMSS inventories that have been entered into the system and processed through a daily run.

Once the I-002S report screen appears, the processing selections available for selecting information to run is through the drop down header menu for Report Level, Responsible RIS, Frequency and the lower column grid for RIS and Inventory Date. See example of the I-002S Report screen below.

To generate an inventory report, click on the Produce Report button, ensure you have selected the correct criteria in the drop down header menu and lower parameter fields. The report will automatically open into Microsoft Internet Explorer and will save the report in its designated file location. To print the report, select the Internet Explorer File menu and print.



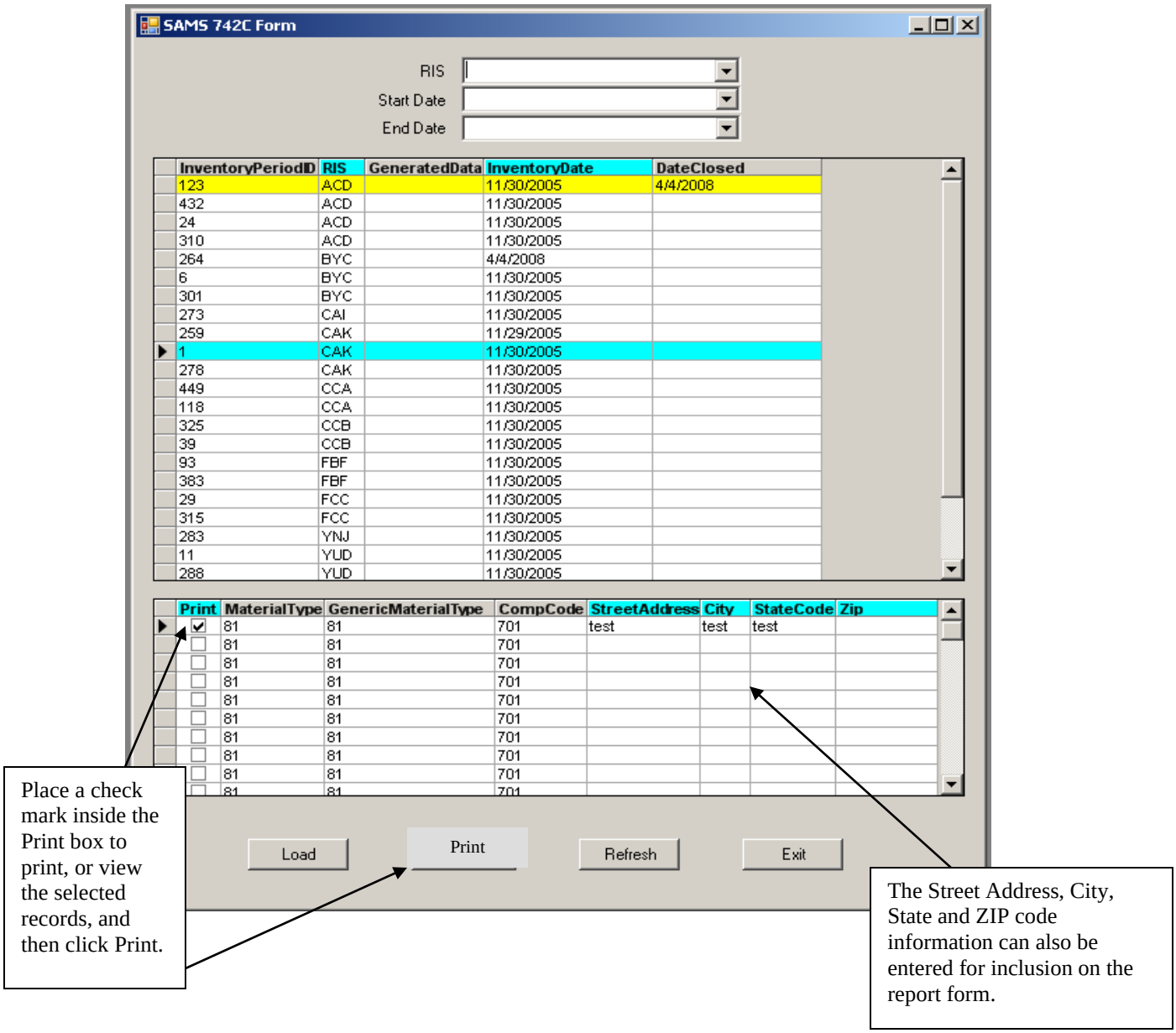
2. 742C Simulated Report

The 742C Simulated Report menu option allows the application user to generate an inventory report in the DOE/NRC Form 742C format.

The 742C Simulated Report screen below shows an example view of all the inventory records in the SAMS system. To generate the list of all current and historical inventory records click on the load button. To only produce a subset of the data loaded into the application the user may query the system by RIS, Start Date, and End Date from the drop down menus. The data retrieved will be displayed by Inventory Period ID, RIS, Generated Data, Inventory Date, and Date Closed information.

Inventory records that appear highlighted as yellow are historical records, and they can not be edited, or accessed in the 742C Simulated report. However, all other inventory records can be viewed and printed through the report function.

Once the records are populated in the screen, select the record to view through the DOE/NRC Form 742C Physical Inventory Listing. Place a check mark in the Print box located in the lower section of the screen and click the Print button to generate the 742C report form. The 742C report form will automatically open into Microsoft Internet Explorer and will save the report in its designated file location. To print the 742C form, select the Internet Explorer File menu and click print.



Place a check mark inside the Print box to print, or view the selected records, and then click Print.

The Street Address, City, State and ZIP code information can also be entered for inclusion on the report form.

NRC FORM 742CU (MM/YYYY)
MANDATORY DATA COLLECTION
AUTHORITY: 10 CFR 30, 40, 50, 70, 72, 74, 75, 150, Public Laws 93-377, 93-438, 96-91

U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY COMMISSION

PHYSICAL INVENTORY LISTING

APPROVED BY OMB: NO. 3150-0058 EXPIRES: MM/DD/YYYY

Estimated burden per response to comply with this mandatory collection request: 6 hours. This information is required by NRC to fulfill its safeguards responsibilities, bilateral agreements, and responsibilities as a participant in the USA/IAEA Safeguards Agreement. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0058), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. NAME AND ADDRESS				2. REPORTING IDENTIFICATION SYMBOL (RIS)
Advanced Physics STREET ADDRESS 123 Anywhere Road				ABC
CITY Commontown	STATE ZA	ZIP CODE 11111	3. INVENTORY DATE 12/31/2002	4. LICENSE NUMBER(S)

5. BATCH DATA

a. MATERIAL TYPE	b. COMPFAC CODE	c. ELEMENT WEIGHT	d. ISOTOPE WEIGHT	e. DOE PROJECT NO.	f. SCRAP PROGRAM	g. WEIGHT PERCENT ISOTOPE	h. OWNER CODE	i. SEQUENCE NUMBER	j. BATCH NAME	k. NO. OF ITEMS	l. KEY MEASURE ITEM	m. MEASUREMENT ID: MEAS. BASIS	MEAS. POINT	MEAS. METHOD	n. ENTRY STATUS	o. MBA	p. SITE ID C	q. PROCESS CODE
33	F02	99	18	GGE044499X			G	1										A
39	771	1	1	GAF2949999			G	2										A
23	771	45	12	GDD49949RM			G	3										A
23	771	65	20	GDD49949RM			G	4										A
6. TOTALS		210	51					5										

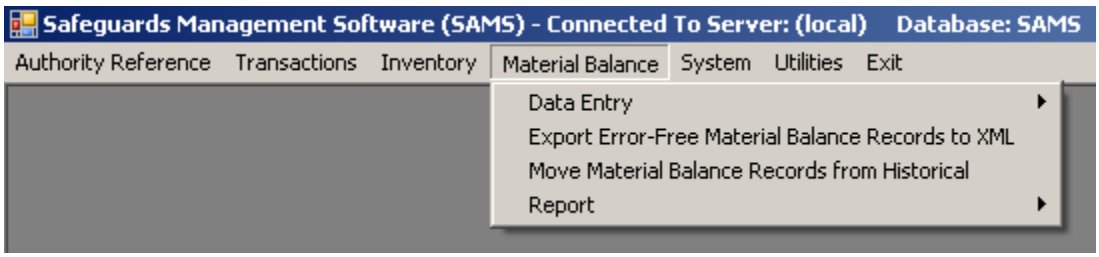
To the best of my knowledge and belief, the information given above and in any attached schedules is true, complete, and correct.

7. SIGNATURE	8. TITLE	9. DATE
John Doe	MC&A Representative	12/31/2002

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.

XI. Material Balance

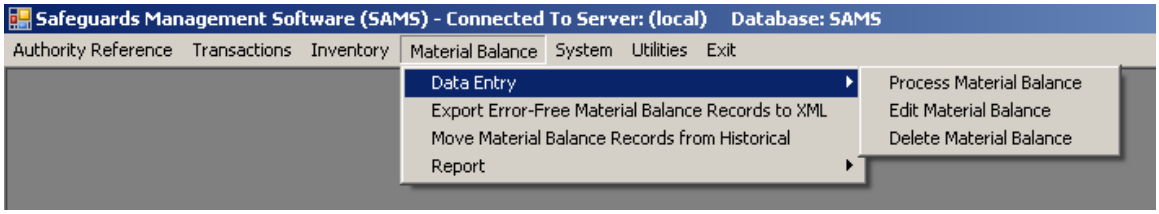
The SAMS Material Balance menu function has four options that the user can select from. These options are Data Entry, Export Error-Free Material Balance Records to XML, Move Material Balance Records from Historical and Reports.



1. To access Material Balance, click on the Material Balance menu.
2. Select from the four menu options for Material Balance.

A. Material Balance Data Entry

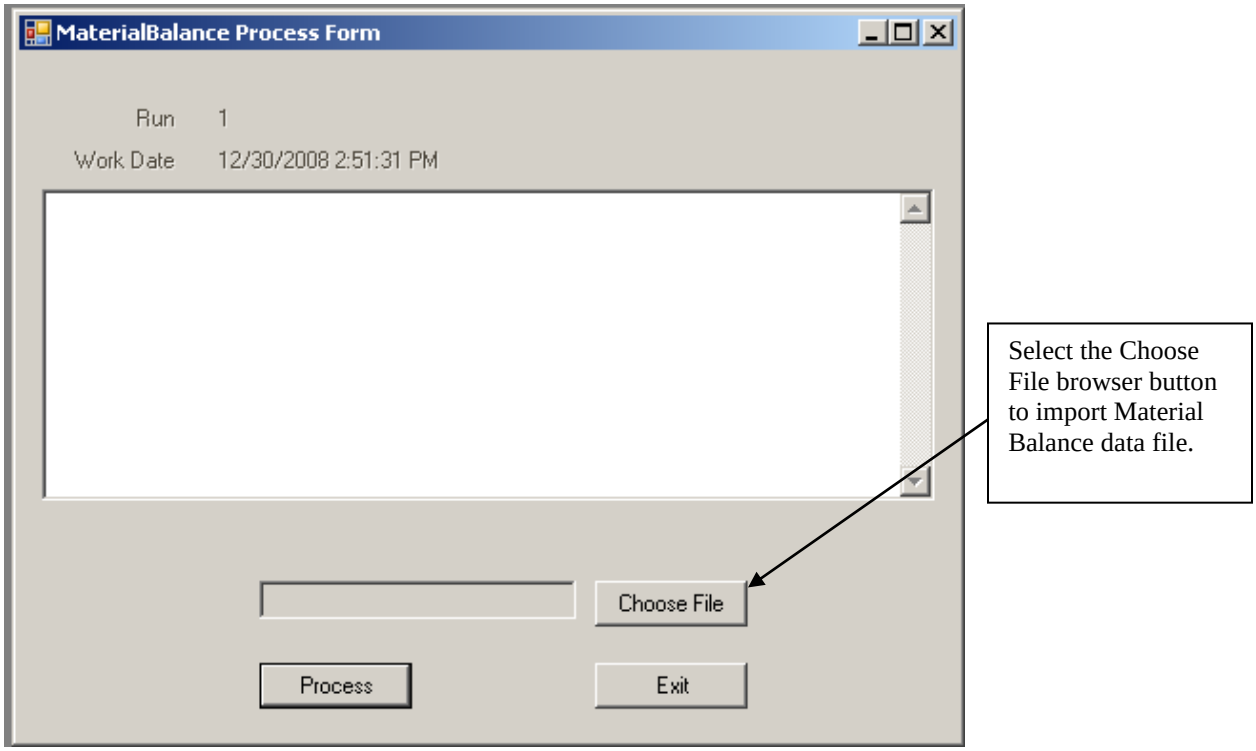
When the Data Entry submenu is selected, an additional three options are available to the system user. They are Data Entry/Process Material Balance, Edit Material Balance, and Delete Material Balance.



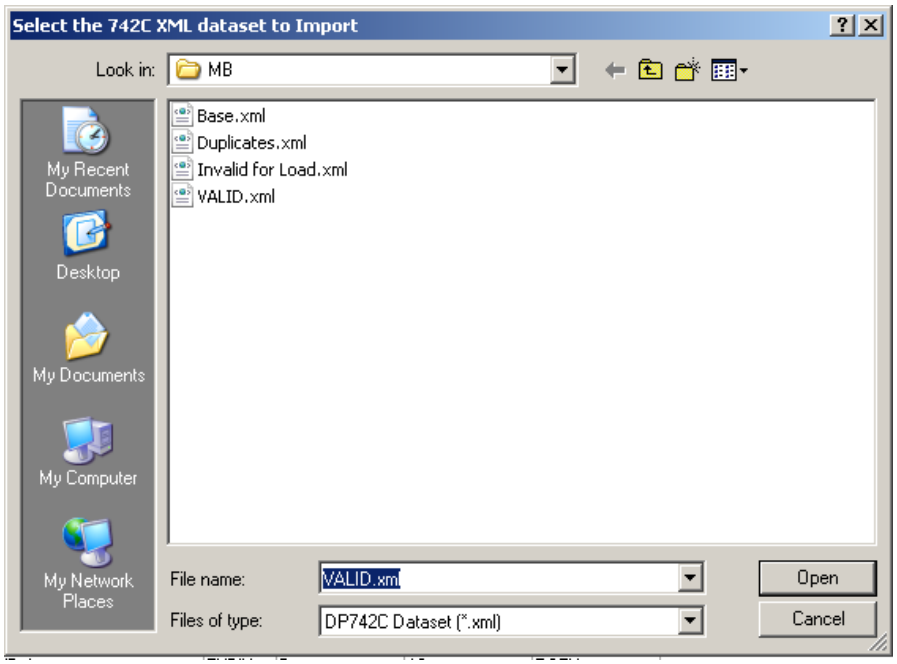
1. Process Material Balance

The Data Entry menu option for Process Material Balance opens the screen view in which data is processed and edit checked. For the process material balance function, the following screen will appear concerning processing material balance data. This function is used to import material balance data into SAMS.

When importing data, the screen below provides a Choose File browser button for selecting the data file to import.

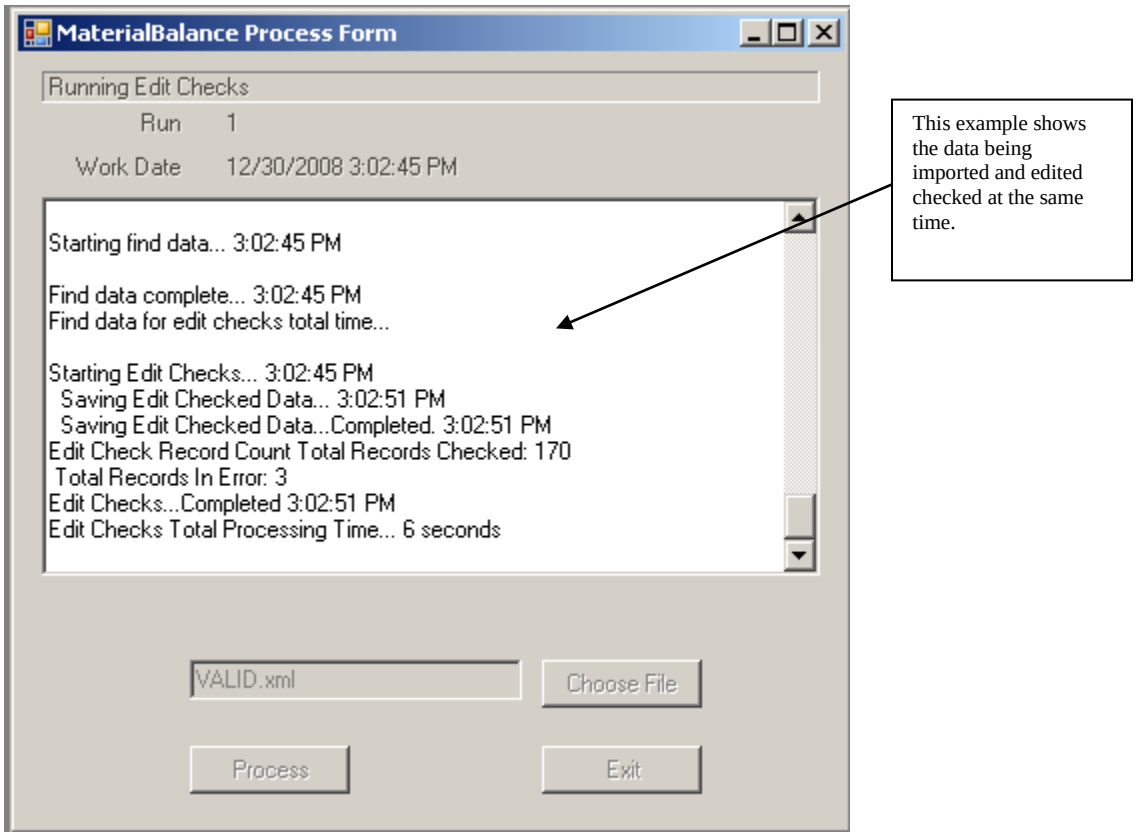


To import material balance XML datasets, click on the Choose File browser button from the import screen and select the XML data file to be imported. The XML Dataset to Import file location screen will automatically display. Select the dataset to be imported by selecting it and then clicking on the open button.



Once the data file is selected and it appears in the Choose File window, click on the Process button to execute the data file import.

The material balance import process will automatically start processing the data, and saving each record associated with the dataset. A message will appear in the Import window indicating the import is complete (see example below of the Material Balance Import process screen). You can scroll up and down the import window as the run is occurring to view the results.

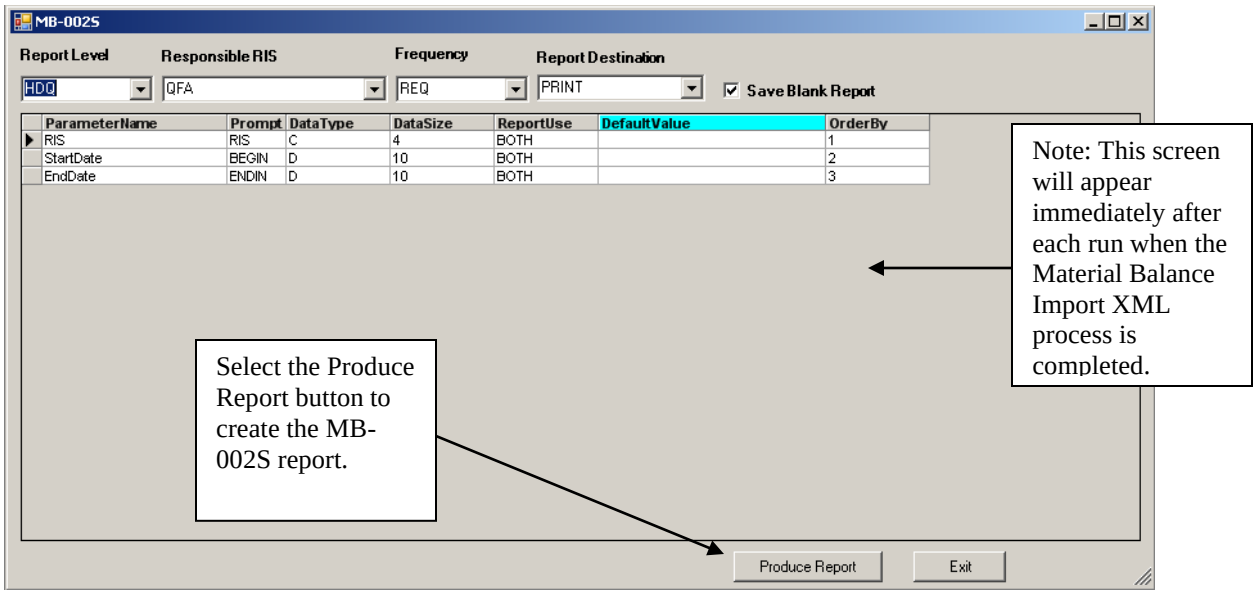


Immediately after the process import is complete, the M-002S Material Balance Data Errors report screen will display for producing the error report. If there are more data files to import just click on the Exit button on the M-002S and repeat the material balance import process.

If there are more material balance XML datasets to import repeat the material balance import process. However, the Produce MB-002S Report screen will appear for producing the MB-002S report immediately after each process run (see example below of the MB-002S produce report screen).

Note: Once the MB-002S Produce Report button is selected it will automatically open into Microsoft Internet Explorer for viewing and will save the report in its designated file location. To print the report, select the Internet Explorer File menu and print.

Select the Exit button on the Produce MB-002S Report screen and return to the Material Balance Import screen to process more XML datasets.

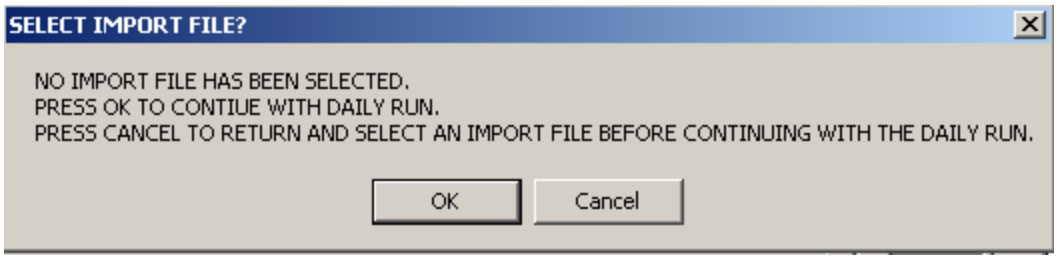


Note that if an I-002S Inventory Error report is generated with a No Data designation on page 2 of the report then there were no errors associated with the process run being conducted.

2. Run Material Balance Edit checks only

If new material balance data has been manually entered or existing data has been manually adjusted, the user **must** re-run the NMMSS Edit Check process using the Material Balance Processing form by selecting the Process button without selecting a file to be imported.

A window will appear noting that no file has been selected and give the user the option to continue with the processing run (edit checks) or cancel and start over with the file selection process to import information.



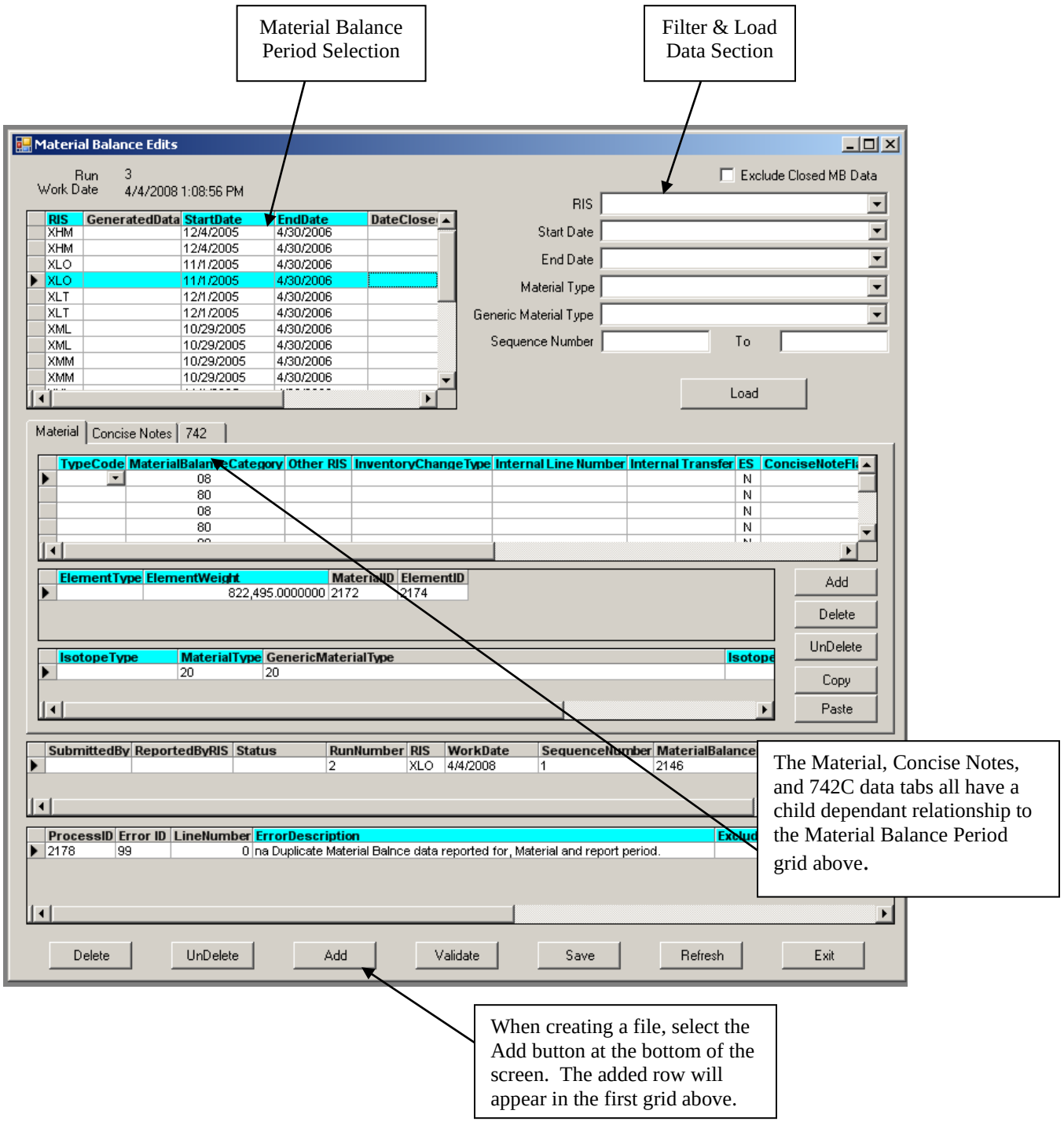
3. Edit Material Balance

The Edit Material Balance option allows the user to view previously imported data loaded through the Process Material Balance function or manually enter material balance data into the system. To view existing data, the user must query the application to pull up

the required records. In performing the Edit Material Balance function, you have the option of selecting the load button to generate the inventory records, or you may add / manually input the material balance record data in the various fields to be processed.

The Edit Material Balance screen is divided into several sections as followed:
1. Filter and load data records section
2. Edit Material Balance window
3. Material, Concise Notes, and 742 data
4. Process Detail information

Note: Column headings that are highlighted (Blue) can be edited. Once changes are made to a file, that particular file will gray out in the grid.



The first portion of the screen display (upper right) provides drop down menu options to select the RIS and material balance data related to what is desired to be retrieved. This is known as the Query selection section. After selecting the material balance period RIS the user must also enter a data range of the material balance period desired. If a Start date

and End Date is not entered into the Query option then no data will be retrieved and displayed. The user also has the option to include additional filters related to the Material Type, Generic Material Type, or Sequence Number ranges to further filter the data being called up.

Once the desired filters are entered the user must select the Load button for the information to be retrieved from the database and displayed on the screen. To view historical material balance data click inside the box to remove the check mark from the Exclude Closed MB Data box.

Note: Data rows that are highlighted yellow in the table grids are considered historical or closed data which cannot be modify even though the column headings are highlighted blue.

Once the data is populated in the fields, select the record that you want to view or edit from the Material Balance Period section. The row that is selected will be highlighted. If no row is selected or highlighted, the program will default to the first row of records from the Material Balance Period section. The Material, Concise Notes, and 742 section is a child dependent to the first grid of Material Balance Period data and is recognized as the Lower Grid. All of the column fields in the Material Balance Edit screen that are highlighted blue can be edited.

To add new records manually the user must select the Add button on the bottom of the screen. This will start a new Material Balance Period series by adding a blank row to the bottom of the upper grid. After the Material Balance Period information is entered for the new records then the user can use the Add button to the right of the Material grids to add addition detail rows as needed dependent on the amount of data to be manually entered.

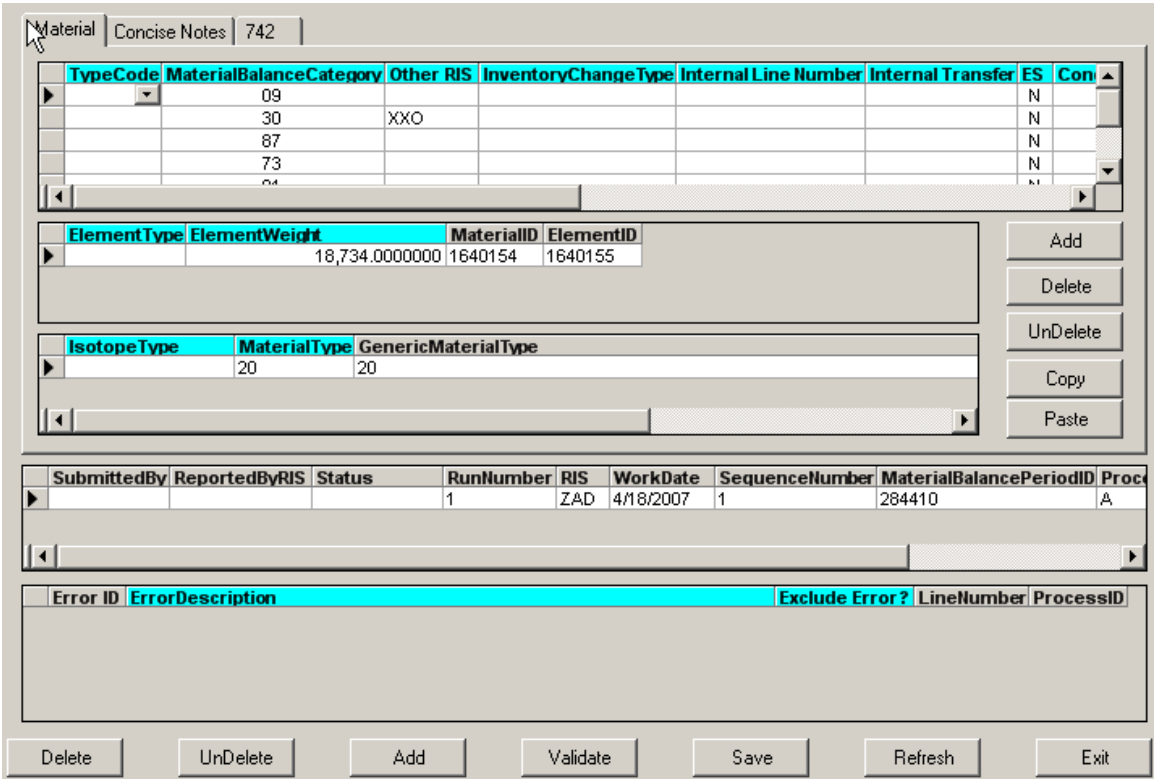
Any data entered into the screen is not added into the database until the Save button is selected. The Material Balance Edit screen will automatically refresh once the data is saved.

There are three Material Balance Edit tabs: Material, Concise Notes, and 742 associated with the Material Balance Edit screen. Below are screen view examples of each tab and the various column headings of information related to that particular tab.

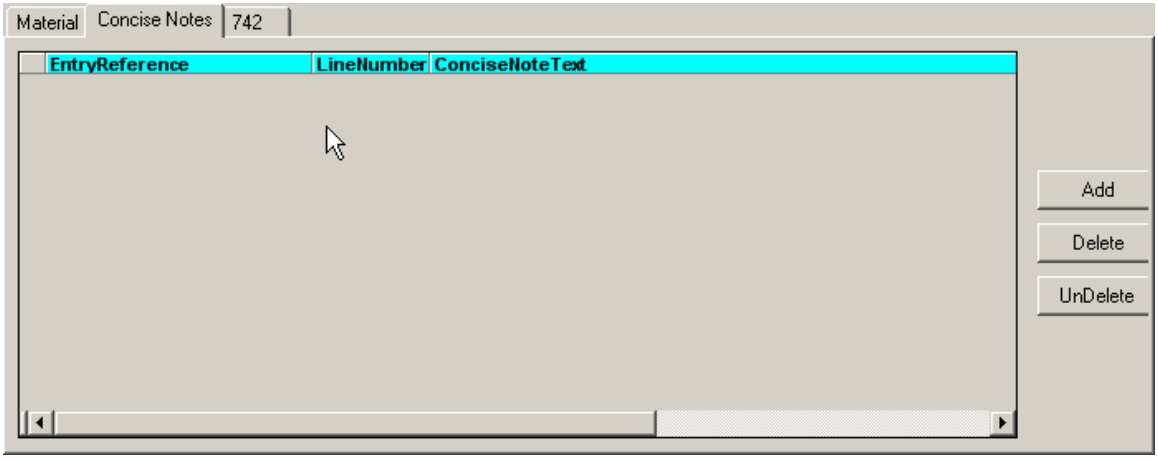
To edit data within a tab, just click on the desired tab. All column headings associated with the tabs that are highlighted can be edited or updated. To edit data, click on the desired record and column field. When you need to add, delete, undelete, validate, save, refresh, or exit records, utilize the key buttons located at the bottom of the screen. Also, when adding a new file use the add button at the bottom of the screen. The added row will appear in the Edit Inventory window. When modifying information for the Material,

Concise Notes, and 742C tabs utilize the side buttons (Add, Delete, UnDelete, Copy and Paste).

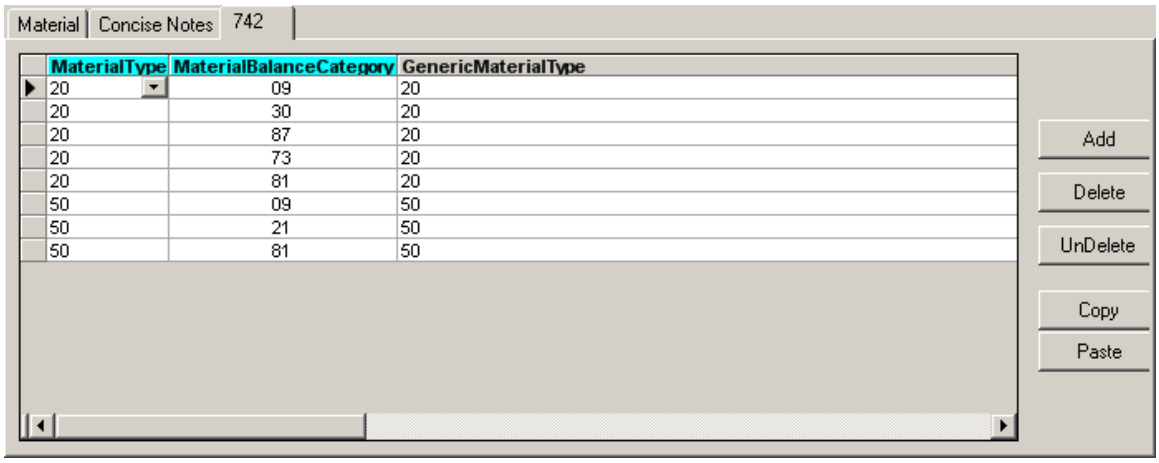
Edit Material Balance Material Tab



Edit Material Balance Concise Notes Tab



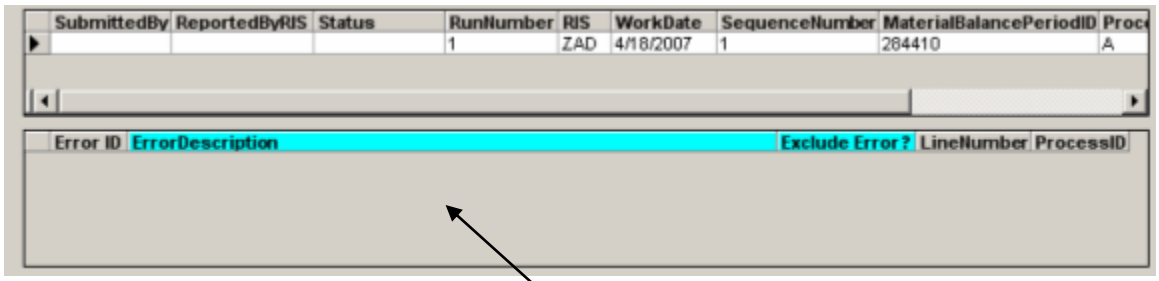
Edit Material Balance 742 Tab



Material Balance Process Detail

The very bottom of the Edit Material Balance window will display the results of the most current process run that has been conducted. If an material balance record has any edit check errors they will be displayed on the screen in this location. The process detail section provides information concerning the Process ID, Error ID, Line Numbers, Error Description and Exclude Error option, etc.

If the user wants to override an edit check error they have the option to exclude the error from being included in future process runs. This section will also display when data being adjusted no longer has errors.



The process detail section provides information concerning the material balance error description and it allows the option of checking the exclude error box to save the record with the error noted. This will also allow the material to be closed/moved to historical file with the error noted.

NOTE: If any records are manually added or adjusted under the Material Balance Edit screen function then the data is saved to the database, however, the data has

not been reprocessed through the edit check function within SAMS yet. The Validate button does verify if there are any errors with the changes but the errors are not saved. The user will need to conduct another process run for the changes to be edit checked and the results updated within the database.

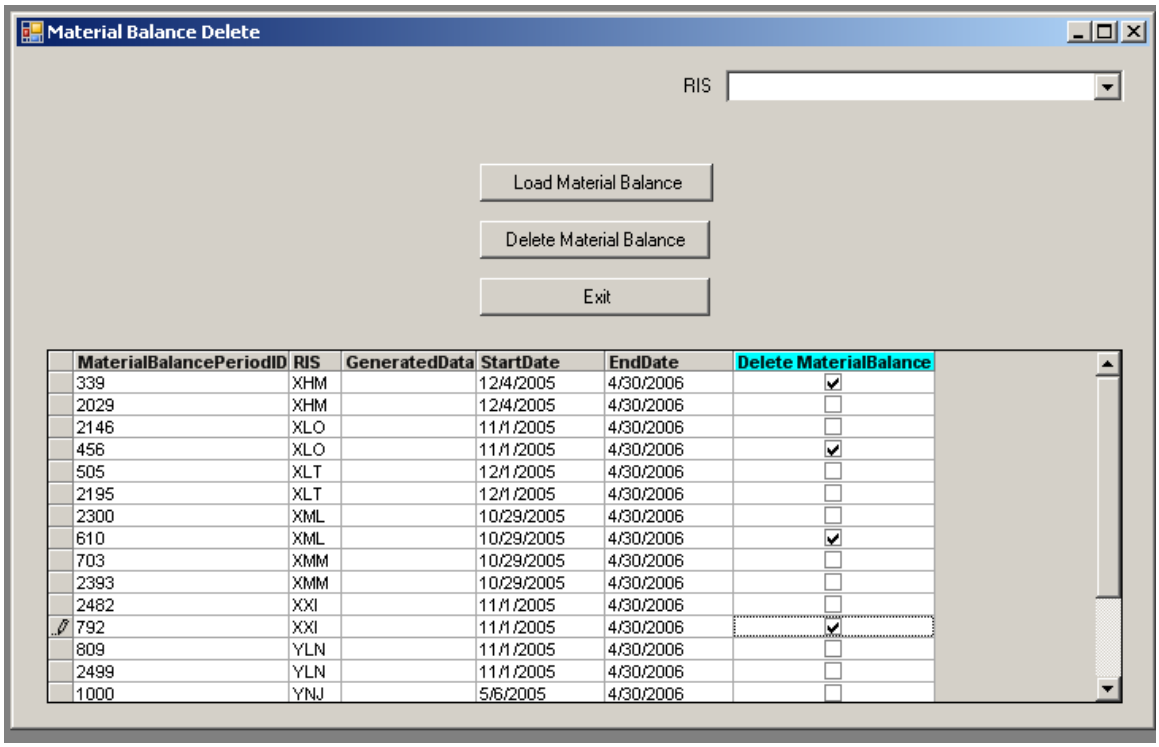
4. Delete Material Balance

The Delete Material Balance function will allow you to select several material balance records to delete at one time, or you can delete one record at a time. However, once a record is deleted it is removed from the system.

Select the RIS material balance to be deleted by typing the RIS name in the RIS window, or clicking on the drop down and selecting from the list of valid RIS names. Once the RIS is selected, click on the Load material balance button, or you may elect to filter all the RIS by leaving the RIS window blank and clicking on the Load material balance button.

The material balance information concerning that particular RIS should appear in the lower grid window (Material Balance Period ID, RIS, Generated Date, Start Date, End Date and Delete Material Balance). Click in the Delete Material Balance box to place a check mark identifying that RIS records for deletion, then click on the Delete material balance button to delete the record.

If you loaded all the RIS but only want to delete certain ones, place a check mark in the Delete material balance boxes to delete. Once the RIS record is deleted, the Delete Material Balance screen will appear with a message indicating “Deletes Completed.” The material balance records selected for deletion will no longer appear in the delete Material Balance window.



MaterialBalancePeriodID	RIS	GeneratedData	StartDate	EndDate	Delete MaterialBalance
339	XHM		12/4/2005	4/30/2006	☑
2029	XHM		12/4/2005	4/30/2006	☐
2146	XLO		11/1/2005	4/30/2006	☐
456	XLO		11/1/2005	4/30/2006	☑
505	XLT		12/1/2005	4/30/2006	☐
2195	XLT		12/1/2005	4/30/2006	☐
2300	XML		10/29/2005	4/30/2006	☐
610	XML		10/29/2005	4/30/2006	☑
703	XMM		10/29/2005	4/30/2006	☐
2393	XMM		10/29/2005	4/30/2006	☐
2482	XXI		11/1/2005	4/30/2006	☐
792	XXI		11/1/2005	4/30/2006	☑
809	YLN		11/1/2005	4/30/2006	☐
2499	YLN		11/1/2005	4/30/2006	☐
1000	YNJ		5/6/2005	4/30/2006	☐

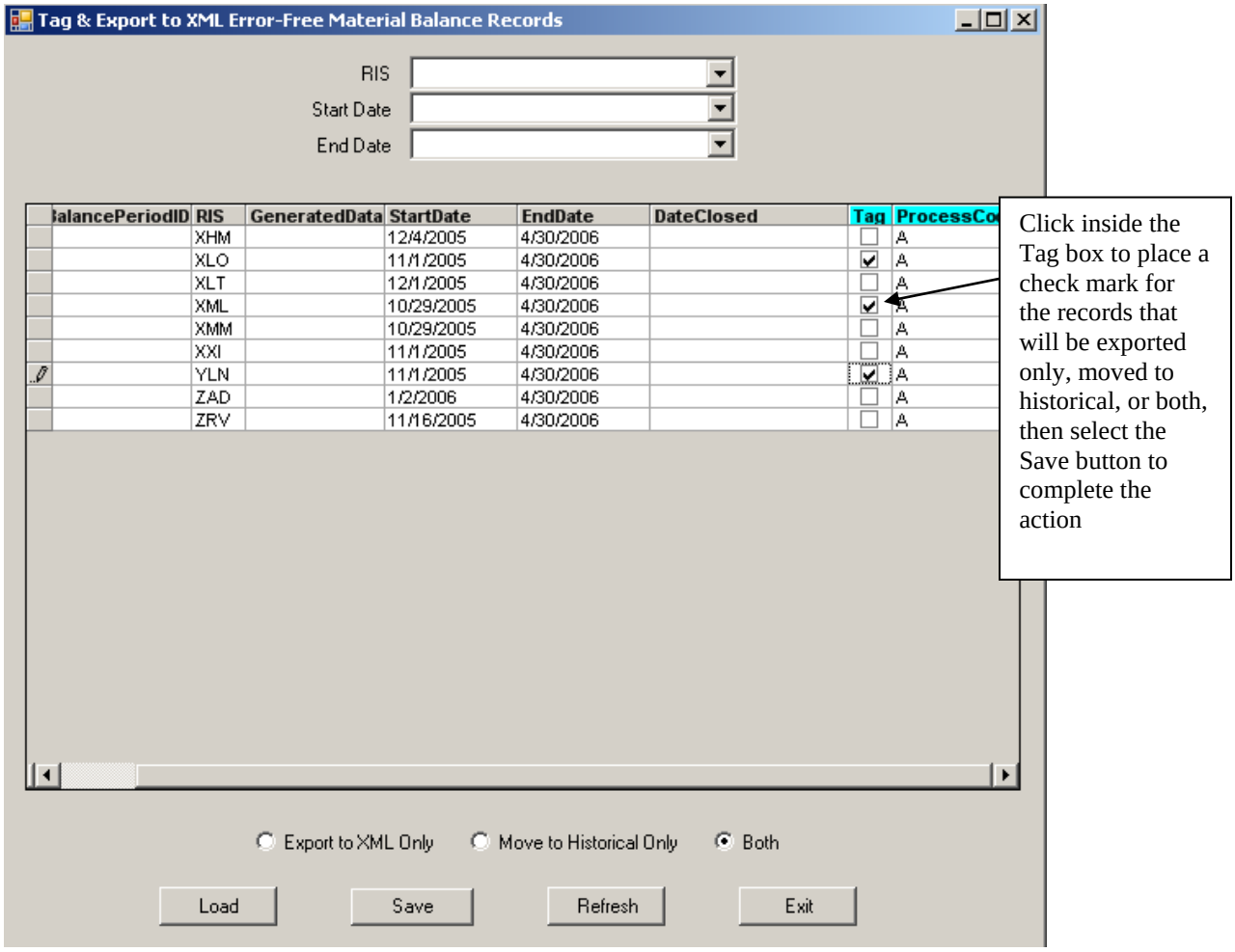
Not that the Material Balance Delete screen option only allows the user to delete the entire material balance period. If the user desires to delete detail material balance information (lines of data within a given period) then they need to go to the Material Balance Edit screen option.

B. Export Error-Free Material Balance Records to XML

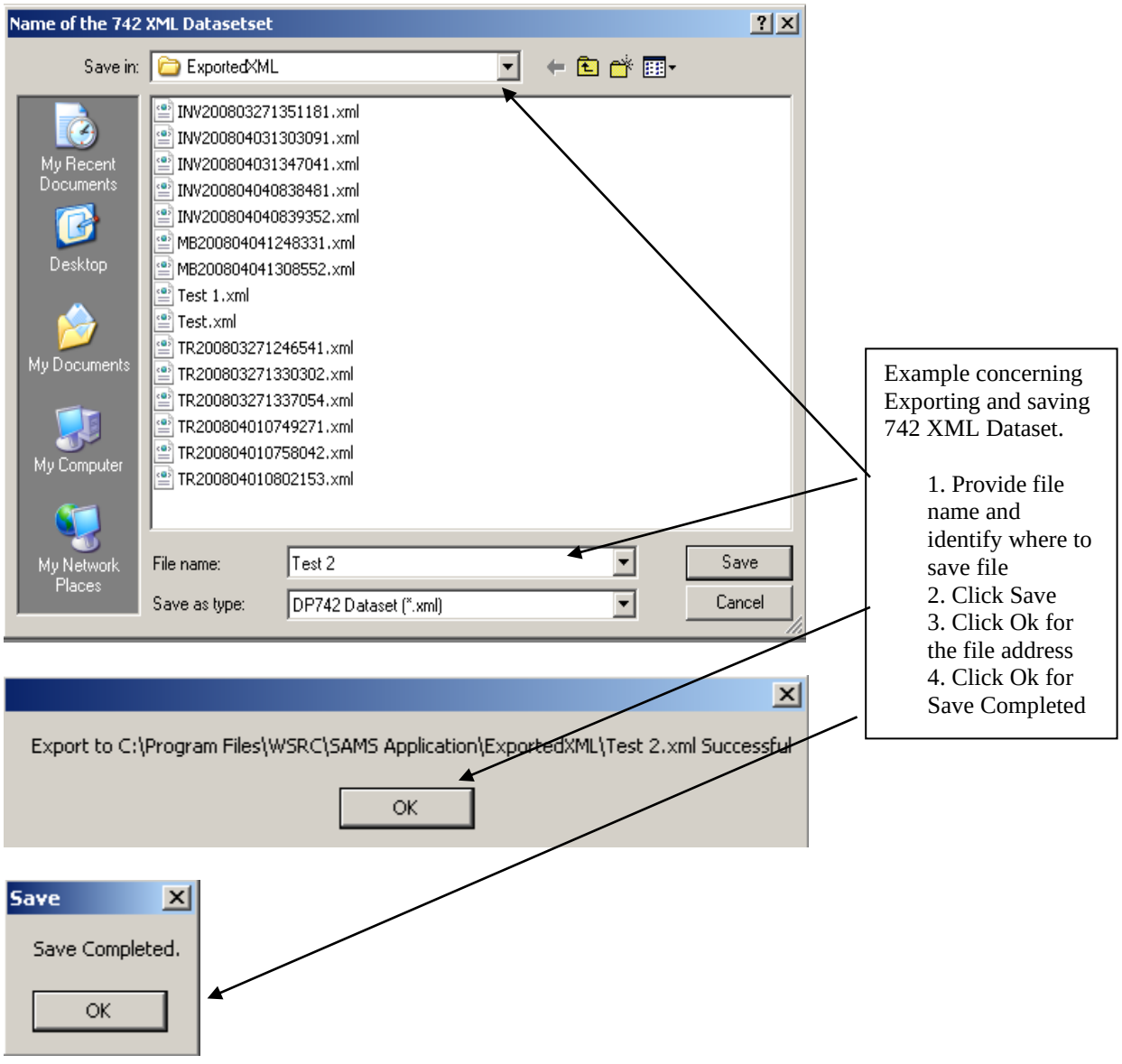
Export Error-Free Material Balance Records contains data with no edit check errors or data with errors that have been overridden (e.g.: excluded). The data can be exported to NMMSS using XML, and/or moved to the Historical files at the same time.

The Tag and Export to XML Error-Free Material Balance Records screen below shows how the material balance data can be loaded by selecting the desired RIS along with the Start Date and End Date ranges for the data to be retrieved, and then clicking on the load button to generate the data.

Once the data is populated place a check mark in the Tag boxes for the records to be Exported to XML only, Moved to Historical only, or perform Both actions at the same time by selecting the Save button.



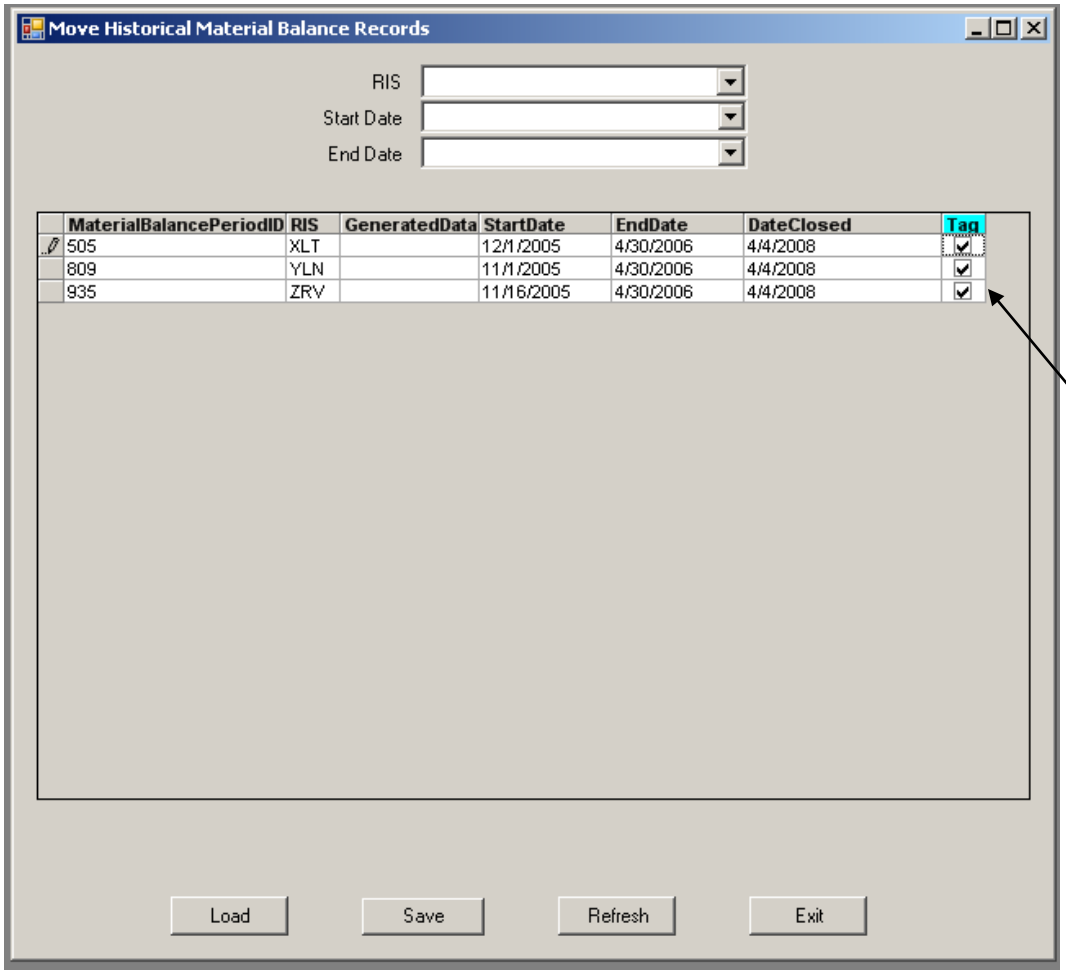
Once the Save button is selected and either the “Export to XML Only” radio button, or the “Both” radio button is selected you will be asked to save the 742 XML Dataset (see example below). However, if you select the “Move to Historical Only” radio button you will receive the Save Completed Ok message.



C. Move Material Balance Records From Historical

The Move Material Balance Records from Historical screen allows the user to reassign a material balance record that has been placed into historical back to active. The screen below shows how the material balance data can be queried and loaded by selecting the RIS, Start Date and End Date information; and then clicking on the Load button to generate the data. If desired the user can leave the drop down windows blank and click the Load button to call up all historical records.

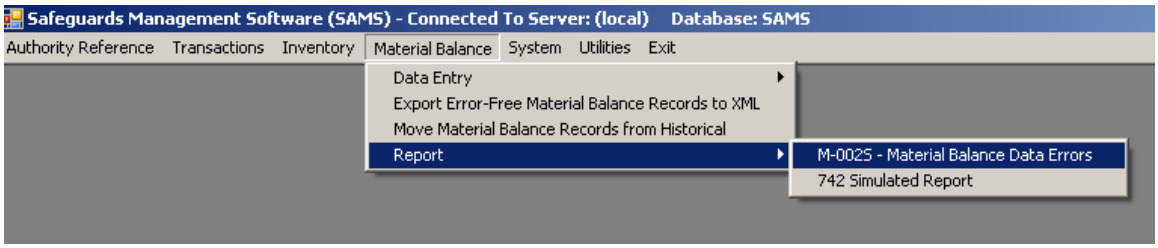
Once the historical data is populated, place a check mark in the Tag box for the material balance records that need to be removed from the historical material balance files, and then select the Save button. There should appear a Save Completed Ok message immediately after.



D. Material Balance Reports

The SAMS Material Balance Reports are MB-002S – Material Balance Data Errors report and 742 Simulated Report.

To access the reports, click on Material Balance menu and Reports submenu and then select the MB-002S – Material Balance Data Errors report, or the 742C Simulated Report.



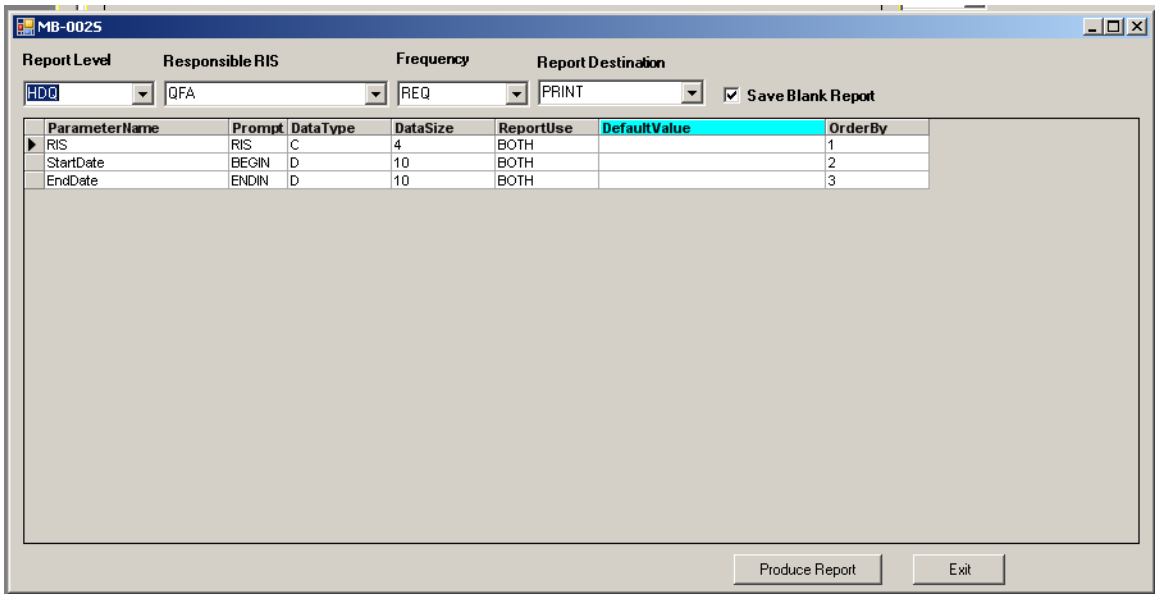
Note: Internet Explorer provides the user the option to allow or not allow Active Content updates when displaying reports. The user needs to ensure that the SAMS system is set to allow active content updates or the XML report formats will not be correct and the printed or viewed report will be shifted.

1. MB-002S – Material Balance Data Errors

The M-002S report is a SAMS specific report that lists out the errors that have been identified for NMMSS material balance records that have been entered into the system and processed through a daily run.

Once the M-002S report screen appears, the processing selections available for selecting information to run is through the drop down header menu for Report Level, Responsible RIS, Frequency and the lower column grid for RIS, Start Date, and End Date. See example of the M-002S Report screen below.

To generate a material balance report click on the Produce Report button, ensure you have selected the correct criteria in the drop down header menu and lower parameter fields. The report will automatically open into Microsoft Internet Explorer and will save the report in its designated file location. To print the report, select the Internet Explorer File menu and print.



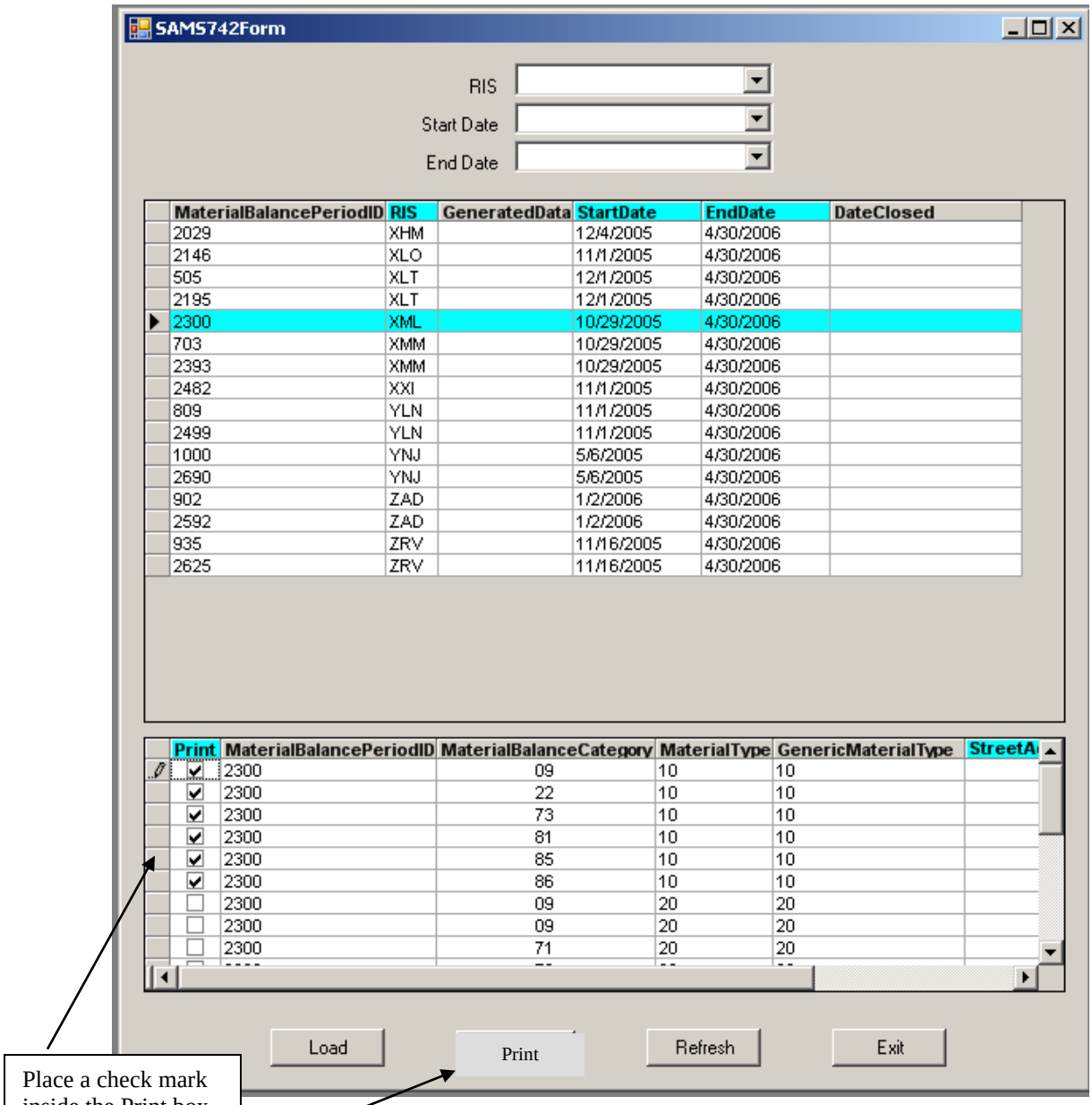
2. 742 Simulated Report

The 742 Simulated Report menu option allows the application user to generate a material balance report in the DOE/NRC Form 742 format.

The 742 Simulated Report screen below shows a view of all the material balance records in the SAMS system. To generate the current and historical records click on the load button, or select a RIS and dates from the drop down menus. The Material Balance Period ID, RIS, Generated Data, Start Date, End Date, and Date Closed information for all the material balance records will appear.

Material Balance records that appear highlighted as yellow are historical records, and they can not be edited, or accessed in the 742 Simulated report. However, all other records can be viewed and printed through the report function.

Once the records are populated in the screen, select the record to view through the DOE/NRC Form 742 Material Balance Report. Place a check mark in the Print box located in the lower section of the screen and click the Print button to generate the 742 report form. The 742 report form will automatically open into Microsoft Internet Explorer and will save the report in its designated file location. To print the 742 form, select the Internet Explorer File menu and click print.


SAMS742Form
RIS
Start Date
End Date
MaterialBalancePeriodID RIS GeneratedData StartDate EndDate DateClosed
2029 XHM 12/4/2005 4/30/2006
2146 XLO 11/1/2005 4/30/2006
505 XLT 12/1/2005 4/30/2006
2195 XLT 12/1/2005 4/30/2006
2300 XML 10/29/2005 4/30/2006
703 XMM 10/29/2005 4/30/2006
2393 XMM 10/29/2005 4/30/2006
2482 XXI 11/1/2005 4/30/2006
809 YLN 11/1/2005 4/30/2006
2499 YLN 11/1/2005 4/30/2006
1000 YNJ 5/6/2005 4/30/2006
2690 YNJ 5/6/2005 4/30/2006
902 ZAD 1/2/2006 4/30/2006
2592 ZAD 1/2/2006 4/30/2006
935 ZRV 11/16/2005 4/30/2006
2625 ZRV 11/16/2005 4/30/2006
Print MaterialBalancePeriodID MaterialBalanceCategory MaterialType GenericMaterialType StreetA
2300 09 10 10
2300 22 10 10
2300 73 10 10
2300 81 10 10
2300 85 10 10
2300 86 10 10
2300 09 20 20
2300 09 20 20
2300 71 20 20
Load
Print
Refresh
Exit
Place a check mark inside the Print box to print, or view the selected records, and then click Print.

DOE/NRC FORM 742U — U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0004 — EXPIRES: MM/DD/YYYY

Estimated burden per response to comply with this mandatory collection request: 5 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, (3150-0004), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

MATERIAL BALANCE REPORT

1. NAME AND ADDRESS

Advanced Physics
123 Anywhere Road
Commonstown, ZA 11111

2. LICENSE NUMBER(S)

3. REPORTING IDENTIFICATION SYMBOL [RIS]: **ABC**

4. REPORT PERIOD (MM/DD/YYYY): FROM **01/01/2002** TO **12/31/2002**

5. MATERIAL TYPE (Submit separate report for each type): **50**

SECTION A — MATERIAL ACCOUNTABILITY

PC	SEG		A. ELEMENT WEIGHT	B. ISOTOPE WEIGHT
A	1	8. BEGINNING INVENTORY -- U.S. GOVT-OWNED	0.00	0.00
		9. BEGINNING INVENTORY -- NOT U.S. GOVT-OWNED		
		RECEIPTS		
		11. PROCUREMENT FROM DOE RIS		
A	2	FROM: **DEF**	11207.00	1112.00
		13. PROCUREMENT -- FOR THE ACCOUNT OF DOE		
		14. DOD RETURNS -- USE A		
		15. DOD RETURNS -- USE B		
		16. DOD RETURNS -- OTHER USES		
		21. PRODUCTION		
		22. FROM OTHER MATERIALS a. ICT		
		b. ICT		
		c. ICT		
		26. RECEIPTS REPORTED TO DOE/NRC ON DOE/NRC 741 (per listed elsewhere)		
		FROM: RIS		
A	3	**GHI**	88.00	26.00
		34. RECEIPTS -- MISC		
		37. PROCUREMENT BY OTHERS		
		38. DONATED MATERIAL -- FROM U.S. GOVT TO OTHERS		
		39. DONATED MATERIAL -- FROM OTHERS TO U.S. GOVT		
		40. TOTAL (Lines 8-39)		
		REMOVALS		
		41. EXPENDED IN SPACE PROGRAMS		
		42. SALES TO U.S. GOVT RIS TO: RIS		
		TO:		
		43. SALES TO OTHERS FOR THE ACCOUNT OF U.S. GOVT RIS		
		TO:		
		44. DOD -- USE A		
		45. DOD -- USE B		
A	4	46. DOD -- OTHER USES	2.00	1.00
		47. EXPENDED IN U.S. GOVT TESTS		
		48. ROUTINE TESTS		
		49. SHIPPER -- RECEIVER DIFFERENCE		
		51. SHIPMENTS REPORTED TO NRC/DOE ON NRC/DOE 741 (per listed elsewhere)		
		TO: RIS		

NRC FORM 742 (MM/YYYY) (PREVIOUS EDITIONS ARE OBSOLETE) — PRINTED ON RECYCLED PAPER

SECTION A (Continued) MATERIAL ACCOUNTABILITY				
PC	SEQ		A. ELEMENT WEIGHT	B. ISOTOPE WEIGHT
		54. SHIPMENTS – MISC		
		58. DONATED MATERIAL – TO U.S. GOVT BY OTHERS		
		59. DONATED MATERIAL – TO OTHERS BY U.S. GOVT		
		65. ROUNDING ADJUSTMENT		
		71. DEGRADATION TO OTHER MATERIALS a. ICT		
		b. ICT		
		72. DECAY		
		73. FISSION AND TRANSMUTATION		
		74. NORMAL OPERATIONAL LOSSES/MEASURED DISCARDS		
		75. ACCIDENTAL LOSSES		
		76. APPROVED WRITE-OFFS		
		77. INVENTORY DIFFERENCE		
		80. ENDING INVENTORY – U.S. GOVT OWNED		
A	5	81. ENDING INVENTORY – NOT U.S. GOVT OWNED	11248	1138
		82. TOTAL (lines 41-81)		
		83. BIAS ADJUSTMENT		

SECTION B FOREIGN OBLIGATIONS				
PC	SEQ	1. COUNTRY OF OBLIGATION	2. ELEMENT WEIGHT	3. ISOTOPE WEIGHT
		4. TOTAL WEIGHT		

SECTION C CERTIFICATION		
To the best of my knowledge and belief, the information given above and in any attached schedules is true, complete, and correct.		
SIGNATURE (See instructions for provisions on confidentiality)	TITLE	DATE
John Doe	MC&A Representative	12/31/2002

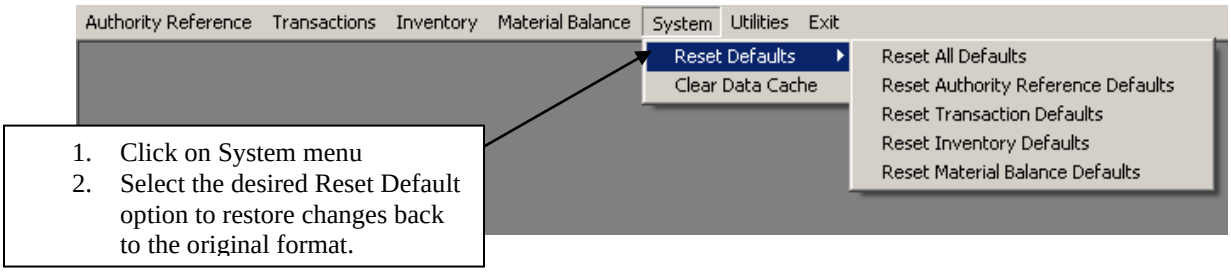
WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECTS. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION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

XII. System

A. Reset Defaults

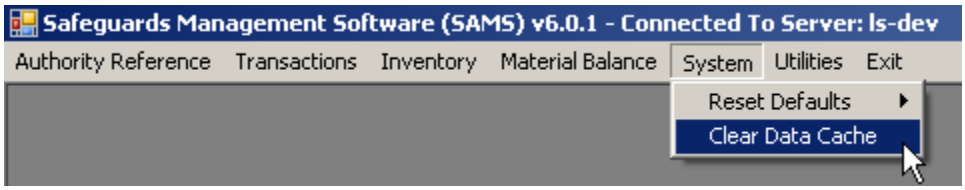
When utilizing the System menu function for Reset Defaults, this function resets all file grid changes such as split windows, resizing columns and column header moves, etc back to the SAMS original format, or you can select specific SAMS modules to reset default to the SAMS original format without affecting all the modules.

Keep in mind, if you only want to reset a single grid back to the original setting, you can also use the shortcut function by performing a right mouse click and selecting "Restore Defaults" for the grid that you are current in.



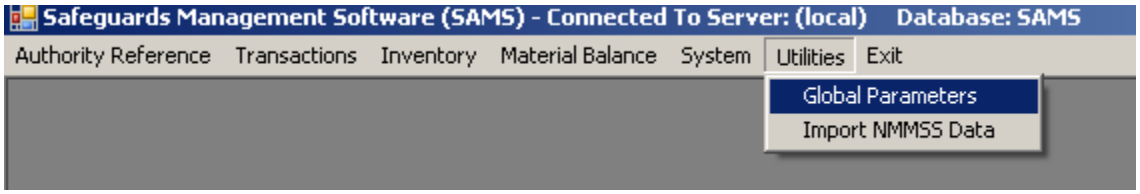
B. Clear Data Cache

There may be times that the importing of data will result in erroneous system errors being produced. If this occurs then their may be a problem with the Data Cache being out of memory. This menu option allows the user to clear this Data Cache area to prevent the continuing of these erroneous errors. The application user may want to clear the Data Cache out on a routine basis to prevent these types of problems from occurring.



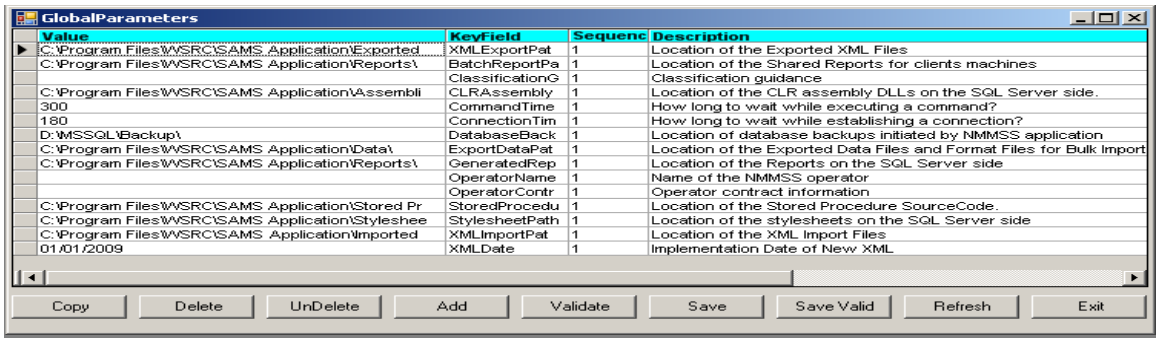
XIII. Utilities

The Global Parameters and Import NMMSS Data functions are located under the Utilities menu. To access the Global Parameters and Import NMMSS Data functions, click on the Utilities menu and select the appropriate function.



A. Global Parameters

Global Parameters establish the default path for the SAMS Reports and Store Procedures which is normally set up and control by the system administrator. You should reference the installation section to determine what is being established when the application is being installed on your computer system.

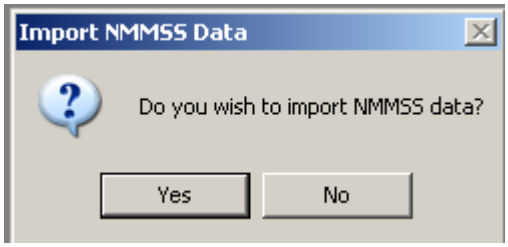


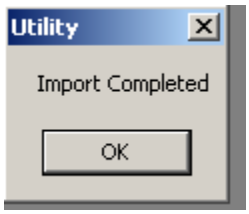
B. Import NMMSS Data

The Import NMMSS Data function is utilized for updating the NMMSS Authority Reference data that will be sent to the SAMS user community. This option will allow the data to be updated without sending out a new version of the SAMS application. NMMSS operations at DOE-HQ will send out a dataset that will include the updated information. It is very important that the user recognize that if the SAMS RIS Address has been unchecked that the information for that RIS will not be updated (see Authority Reference section).

When selecting the SAMS Import NMMSS Data function from the Utilities menu, you will receive the below screen messages stating “Do you wish to import the NMMSS data?” If you click no, SAMS application will return to the main menu screen.

If you click yes, SAMS application will start importing the data. Once the import is complete you will receive another message indicating the “Import Completed”. At this point the Authority Reference information will have been updated.





Additional information will be sent out related tot his process when the updated Authority Reference data files are sent out for inclusion into the SAMS application.

XIV. Exit

Select Exit on the menu bar whenever you want to close the SAMS program application.