CONTENTS OF ENCLOSURE 2

Electronic pdf copies of the following documents on compact disk (CD):

1. *LANL Waste Compliance and Tracking System (WCATS) User's Manual*, MAN-5004, R3, LA-UR-16-20520

2. *Reviewing and Approving Waste Stream Profiles (WSP) in WCATS*, WM-SVS-AP-201, LA-UR-16-20517

Los Alamos NATIONAL LABORATORY	Waste Management Division Office WM-DO	
Title:	**Waste Compliance and Tracking System (WCATS)** **Version 2 User's Manual**	
Document/Revision: MAN-5004,R3	Next Review:	Page 1 of 238

Authority	Name	Title/Org	Signature	Z#	Date
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Comments Page

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COMMENTS

Please note: Each comment must be initialed and dated by the requesting signatory. Comments that result in changes to the document must identify the text that requires change (e.g., page #, section #, and quoted text), and specify the new text for which all signatories have concurred.

History of Revisions

Revision	Effective Date	Section(s) Revised	Reason For Change
MAN-5004, R0	03/29/2010	New	Original Release
MAN-5004, R1	10/25/2010	Waste Stream Section	Added Stage III-WPF instructions
MAN-5004, R2	3/2/2012	All	Updated to include new functionality for Chemical and Hazardous Waste
MAN-5004, R3	7/16/2015	All	Minor revision to include brief descriptions of some new functionality and other minor wording updates to document.

Table of Contents

Acronyms

Acronym	Definition
AK	Acceptable Knowledge
AOC	Area of Concern
CAS	Chemical Abstract Service
CMR	Chemistry and Metallurgy Research
CTS	Calibrations Tracking System
CWDR	Chemical Waste Disposal Request
CWM	Chemical Waste Management
DOE	Department of Energy
DOT	Department of Transportation
EPA	Environmental Protection Agency
FGE	Fissile Gram Equivalent
HAZ	Hazardous
HE	High Explosive
INL	Idaho National Laboratory
LANL	Los Alamos National Laboratory
LDR	Land Disposal Restriction
LLNL	Lawrence Livermore National Laboratory
LLW	Low Level Waste
LOC	Level of Concern
MLLW	Mixed Low-Level Waste
MSDS	Material Safety Data Sheet
MTRU	Mixed Transuranic
NDA	Non-Destructive Assay
NMSW	New Mexico Special Waste
NORM	Naturally Occurring Radioactive Material
NTS	Nevada Test Site
NWW	Non-Wastewater
PCB	Polychlorinated Biphenyl
PDA	Personal digital assistant
PE	Plutonium Equivalent
PF-4	Plutonium Facility, Building 4
PMT	Plutonium Manufacturing & Technology
RCA	Radiological Controlled Area
RCRA	Resource Conservation and Recovery Act
RLWTF	Radioactive Liquid Waste Treatment Facility
RLWTP	Radioactive Liquid Waste Treatment Plant
SME	Subject Matter Expert
SNL	Sandia National Laboratory
SW	Solid Waste
SWWS	Sanitary Waste Water System
TA	Technical Area
TCLP	Toxicity Characteristic Leaching Procedure
TRU	Transuranic

Acronym	Definition
TSDF	Treatment, Storage, and Disposal Facilities
UHC	Underlying Hazardous Constituents
VE	Visual Examination
VI	Visual Inspection
WAC	Waste Acceptance Criteria
WCATS	Waste Compliance and Tracking System
WDR	Waste Disposal Request
WIPP	Waste Isolation Pilot Plant
WMC	Waste Management Coordinator
WMS	Waste Management System
WPF	Waste Profile Form
WSP	Waste Stream Profile
WW	Wastewater

Glossary of Icons

Icon		Description
General Icons		
	**Error**	Signifies an error.
	**Refresh**	Refreshes data in the active screen.
	**Roll-back**	Returns screen to the previous state before last save.
	**Save**	Saves data in open profile.
	**Search**	Deploys the finder screen for the corresponding field.
	**View Profile**	Deploys profile for corresponding field.
Location Icons		
	**Company**	Signifies a company.
	**Facility**	Signifies a facility.
Lock Icons		
	**Locked**	Signifies locked profile. Unlocks profile when clicked.
	**Unlocked**	Signifies screen is unlocked. Locks screen when clicked.
Navigator Icons		
	**Administrative Forms**	Deploys the administration subsystem.
	**Administrative Tasks**	Deploys the administrative tasks navigator.
	**Container**	Deploys the container navigator.
	**Disposal Task**	Deploys the disposal task navigator.
	**Equipment**	Deploys the equipment navigator.
	**Manifest**	Deploys the manifest navigator.
	**Process Task**	Deploys the process task navigator.
	**Shipping/Transfer Task**	Deploys the shipping/transfer task navigator.

Icon		Description
Navigator Icons (continued)		
	**Waste Stream**	Deploys the waste stream navigator.
Print Icons		
	**Barcode**	Prints the barcode.
	**Print**	Prints the profile report.
Status Icons		
	**Green**	Signified one of the following: Profile is active. Task has been approved and/or executed. Response is acceptable and desired.
	**Yellow**	Signified one of the following: Profile is pending execution Task is pending execution. Response is accepted but not desired.
	**Red**	Signified one of the following: Profile has been cancelled and/or voided. Task execution has been revoked. Response is not acceptable.
	**Gray**	Signified one of the following: Profile has been voided Task is unavailable.
Person Profile Icons		
	**Person Profile**	Deploys the person profile.
	**New Message**	Signifies the user has a new message for viewing in the person profile.
Waste Icons		
	**Non-Waste**	Signifies a Non-Waste waste type.
	**MTRU Waste**	Signifies a MTRU waste type.
	**TRU Waste**	Signifies a TRU waste type.
	**Empty Container**	Signifies an empty waste container.
	**Lab pack**	Signifies a lab pack with waste inside.
	**Hazardous Lab pack**	Signifies a lab pack with hazardous waste inside.
	**Hazardous Radioactive Lab pack**	Signifies a lab pack with hazardous radioactive waste inside.

	**Radioactive Lab pack**	Signifies a lab pack with radioactive waste inside.

Icon		Description
Waste Icons (continued)		
	**Liquid Waste Item**	Signifies a liquid waste item.
	**Liquid Waste in a Tank**	Signifies a liquid waste in a tank.
	**Hazardous Liquid Waste Item**	Signifies a liquid hazardous waste item.
	**Hazardous Liquid Waste in a Tank**	Signifies a liquid hazardous waste in a tank.
	**Hazardous Radioactive Liquid Waste Item**	Signifies a liquid hazardous radioactive waste item.
	**Hazardous Radioactive Liquid Waste in a Tank**	Signifies a liquid hazardous radioactive waste in a tank.
	**Radioactive Liquid Waste in a Tank**	Signifies a liquid radioactive waste in a tank.
	**Radioactive Liquid Waste Item**	Signifies a liquid radioactive waste item.
	**Solid Waste Item**	Signifies a solid waste item.
	**Solid Waste in Container**	Signifies a solid waste in a container.
	**Hazardous Solid Waste Item**	Signifies a hazardous solid waste item.
	**Hazardous Solid Waste in Container**	Signifies a hazardous solid waste in a container.
	**Hazardous Radioactive Solid Waste Item**	Signifies a hazardous radioactive solid waste item.
	**Hazardous Radioactive Solid Waste in Container**	Signifies a hazardous radioactive solid waste in a container.
	**Radioactive Solid Waste Item**	Signifies a radioactive solid waste item.
	**Radioactive Solid Waste in Container**	Signifies a radioactive solid waste in a container.
Mobile Application Icons		
	**Connected**	Signifies when the mobile device is connected to the network.
	**Volume**	Alters the volume settings of the mobile device.
	**Keyboard**	Displays/Hides the mobile application keyboard.

	**Exit**	Exits the current screen.
	**Information**	Provides information for the current screen.
	**Open**	Opens related screens.
	**More**	Displays alternative options.

Terms and Definitions

Term	Definition
Acceptable Knowledge	A waste stream characterization method that can be used to meet all or part of the waste analysis requirements appropriate for the waste media. The method may include documented process knowledge (knowledge of process; KOP), supplemental waste analysis data, and/or facility records of analysis.
Ash	Ash that results from the incineration or transformation of solid waste.
Characterization	The determination of a waste's physical, chemical, and radiological characteristics with sufficient accuracy to permit proper segregation, treatment, storage, and disposal according to the final treatment, storage, or disposal facility's (TSDF's) waste acceptance criteria (WAC).
Classified Waste	Classified matter determined by a generating group to be a waste that may include, but is not limited to, documents, film, parts or assemblies, safe or vault locking devices, computer tape, degaussed magnetic tape, metal parts, or classified shapes.
Container	Generic term that can mean either a waste item or packing container
Checklist Review	Evaluation necessary for executing a task.
Decommission	To permanently remove from service of surface facilities or equipment.
Discharge	Disposal, spilling, leaking, pumping, pouring, emitting, emptying, or dumping into water or in a location and manner where there is a reasonable probability that the discharged substance will reach surface or subsurface water.
Disposal	The discharge, deposit, injection, dumping, spilling, leaking, or placing of any waste into or on any land or water so that such waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.
Facility	Group or area identified in WCATS as a facility.
General Storage Area	A PCB storage area that meets specific record-keeping and construction requirements, including secondary containment, for up to 90-day, on-site storage of PCB waste.
Hazardous Waste	Waste that exhibits any of the hazardous characteristics: ignitibility, corrosivity, reactivity, or toxicity.
High Explosive Waste	Any waste containing material having an amount of stored chemical energy that starts a violent reaction when initiated by impact, spark, or heat. This violent reaction is accompanied by a strong shock wave and the potential for propelling high-velocity particles.
High-Level Waste	The highly radioactive waste material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations, and other highly radioactive material that is determined, consistent with existing law, to require permanent isolation.
Mobile device	A wireless PDA that enables users to employ the WCATS application while performing field work.
Lab pack	Refers to placing several smaller, sealed containers of compatible hazardous wastes into a larger container along with packing material.

Less than 90-day Accumulation Area	A designated space for accumulating hazardous or mixed waste in containers or tanks; the waste may not remain in the accumulation area longer than 90 days.
Liquid Waste	A waste material that is determined to contain free liquids.
Low-Level Waste	Radioactive waste that is not high-level waste, spent nuclear fuel, transuranic waste, byproduct material, or naturally occurring radioactive material.
Mini Task	A mini task is a characterization task associated with container profiles, such as drum prep, visual inspection, and radioassay. Mini tasks only apply to TRU waste and require approval to execute.
Term	**Definition**
Mixed Waste	Any waste containing hazardous waste and source, special nuclear, or by-product. The use of the generic term "mixed waste" shall refer to both mixed LLW waste and mixed TRU waste.
Overpack	A container used by a single shipper to provide protection or convenience in handling a package or to consolidate two or more packages.
Panel	Subset of profile; it organizes the actions possible in that window by type of activity, such as General Information or Comment Log
Payload	Waste, waste item. Payload is a term used on the mobile device
Primary waste stream	Waste stream that originates at a generating unit or facility
Process	An operation identified in WCATS, such as shipping, cementation, etc.
Process/status	TA-55 code that identifies the process and status used to generate a waste item
Profile	The WCATS record associated with a task, container, waste stream, etc.
Radioactive Waste	Waste that has been determined to contain added radioactive material or activation products or concentrated naturally occurring radioactive material (NORM) by either monitoring and analysis, acceptable knowledge, or both; or does not meet radiological release criteria.
Satellite Accumulation Area	A designated space for accumulating hazardous and mixed waste where the volume of hazardous waste may not exceed 55 gallons or the volume of acutely hazardous waste may not exceed one quart. The accumulation area must be located at or near the point of generation and be under the control of the generator/operator of the process generating the waste.
Secondary waste stream	Waste stream that originates at a treatment unit or facility
Service unit	Specific storage area or process within a facility identified in WCATS
Sludge	Waste in a solid, semi-solid, or liquid physical form generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control device. Sludge does not include treated effluent from these plants/devices.
Solid Waste	Garbage, refuse, sludge (as defined above) and other discarded material including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities.
Storage	The temporary holding of radioactive waste for transfer to treatment, storage, or disposal elsewhere. Waste must be packaged for shipment in accordance with the LANL WAC. Storage must not exceed one year, except for wastes with no disposal path.

Storage Area	A registered area where certified waste containers are stored for up to one year.
Task	Action performed on a process, container, waste stream, etc.
Transuranic (TRU) Waste	Radioactive waste containing more than 100 nanocuries (3700 Becquerels) of alpha-emitting transuranic isotopes per gram of waste, with half-lives greater than 20 years, except for: (1) high-level radioactive waste; (2) waste that the Secretary of Energy has determined, with the concurrence of the Administrator of the Environmental Protection Agency, does not need the degree of isolation required by the 40 CFR Part 191 disposal regulations; or (3) waste that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR Part 61.
Treatment	When applied to hazardous or hazardous components of mixed waste, any method, technique, or process-including neutralization-designed to change the physical, chemical, or biological character or composition of any waste so as to neutralize such waste or so as to recover energy or material resources from the waste or so as to render such waste nonhazardous or less hazardous and safe to transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.

Term	Definition
Treatment, Storage, and Disposal Facility (TSDF)	A permitted or interim status hazardous waste management unit where hazardous or mixed waste may be stored or treated prior to disposal.
Universal Waste	The universal waste requirements ease some of the regulatory requirements for collecting and managing these common waste types.
Waste Acceptance Criteria	Criteria that must be met before a waste is accepted for treatment, storage, or disposal. Waste acceptance criteria may involve the physical form of a waste, a waste's container, its radioactivity, packaging, labeling, etc.
Waste Characterization	The determination of a waste's physical, radiological, and chemical characteristics with sufficient accuracy to permit proper classification and management.
Waste Generator	Individuals and their line management having direct responsibility for operations that generate waste. A waste generator may be a member of the organization responsible for the facility or site where the waste was generated. Waste generators have the responsibility for waste minimization, characterization, storage, and disposal of the waste they generate.
Waste item	Any item that is disposed of at LANL
Waste Management Coordinator (WMC)	The individual responsible for coordinating waste management activities on behalf of waste generators, line managers, facility managers, field project leaders, waste management groups, and other Laboratory organizations. This individual also coordinates resolution of waste management issues on behalf of his/her waste-generating organization and reviews documents pertaining to the management of waste.
Waste Management	The planning, coordination, and direction of those functions related to generation, handling, treatment, storage, transportation, and disposal of waste, as well as associated surveillance and maintenance activities.
Waste profile form	Form used to characterize waste from the time a packing container is closed
Waste stream	A waste or group of wastes from one or more processes or facilities with similar physical,

	chemical, and/or radiological characteristics. There are various types of waste streams, including AK profiles, Waste Profile Forms, and others.
Work path	Set of actions predefined for a specific task or set of tasks

1 Introduction

1.1 User Manual Scope

This manual has been written to provide a general reference of the usage of WCATS. Because WCATS is designed to be used at many different kinds of facilities, much of the usage of the application is driven by the metadata configuration of the system. General usage of the system and the different types of tasks provided is included in this document, but custom usage and an exhaustive list of configuration options will not be provided. This manual is not intended to be a replacement for detailed work procedures or desk instructions, and it will not include configuration details such as service unit names, waste stream numbers for selection, etc. Any use of such information in this document is only provided as an example.

1.2 Application Overview

WCATS (Waste Compliance and Tracking System) supports the generation, characterization, processing, and shipment of LANL radioactive, hazardous, and industrial waste. Regulatory drivers include Resource Conservation and Recovery Act (RCRA) hazardous waste, Department of Transportation (DOT) shipping, National Nuclear Security Agency (NNSA) nuclear material control and accountability, Department of Energy (DOE) nuclear safety, treatment, storage, and disposal facility (TSDF) permit, and transuranic (TRU) waste certification requirements.

WCATS is a desktop application that can be used on both PCs and Macintosh (Mac) machines. Some functions can also be performed via mobile devices that can communicate with the system via a docking device or cradle. Information captured and maintained by WCATS is stored in an Oracle database. WCATS also comes with a Report Tool, Crystal Reports, which is used to create reports for end users and WCATS support personnel. End users must consult with WES Data Stewards for ad-hoc reports.

This user's manual provides users with detailed instructions on specific tasks that WCATS can perform as well as information on using the mobile device and general information.

1.2.1 Waste Streams

Waste streams act as templates for waste. They provide characterization information for containers. More information about waste streams can be found in Section 4, *Creating and Managing Waste Streams and WPFs*.

1.2.2 Work Paths

Work paths provide the workflow of tasks for containers. They come in two types: strict work paths and permissive work paths. Containers on strict work paths may only follow the tasks provided, but permissive work paths allow any type of tasks to be performed, but only tasks in the workflow are listed as pending on permissive work paths. See Section 5.1.2, *Work Paths* for detailed information about the use of work paths in WCATS.

1.2.3 Tasks

Tasks are events that occur at a specific date and time within the system. These tasks may include containers, and are of one of the following types:

- **Processing / Treatment Tasks** change the nature of the waste. These activities result in new container records. Examples of processing and treatment tasks include packaging, consolidation, cementation, tank transfer, and others.
- **Shipping / Transfer Tasks** represent the movement of containers within the system. They can move containers between facilities or companies (shipments) or within a facility (transfers).
- **Disposal Tasks:** represent the disposal of waste containers within the system.
- **Administrative Tasks** are those that do not change or add any information about the waste. These often include review tasks, and can even include review tasks with no containers.
- **Characterization Tasks** are tasks which do not change containers but do add information about them. They may include information about a drum closure, some types of task-based radioassays, or other tasks which will always use the mini-task controller.

1.2.4 Containers

In WCATS, 'container' is a generic term used to signify any type of waste, including items, drums, SWBs, or any other unit of waste.

1.2.5 User Permissions

WCATS users are granted permission to access records based on their job defined needs. To request permissions in WCATS, contact wastehelp@lanl.gov.

1.3 End-User System Requirements

To access and use the WCATS application successfully, end users must meet several requirements. Please see your system administrator if you have any questions regarding your end-user requirements.

1.3.1 Hardware Requirements

To use the WCATS Desktop client, a user's PC must contain, at a minimum, the following hardware:

- 4 GB RAM
- Hard drive with 1 GB free space
- Monitor set to 1024 x 768 or greater screen resolution
- Mouse and keyboard
- Yellow network connection

1.3.2 Software Requirements

It is required that the user's **PC** contains the following software:

- Microsoft Windows Windows 7 (or current IA-Approved Windows OS)
- IA-Approved Web browser, such as Mozilla Firefox or Internet Explorer
- Java Runtime 1.7+

It is required that the user's **Mac** contains the following software:

- Mac OS X 10.8 or 10.9 (or current IA-Approved Mac OS)
- Web browser, such as Safari or Mozilla Firefox
- Java Runtime 1.7+

1.3.3 Application Requirements

It is required that the user obtains the following:

- LANL-issued Z # and administrative-level access
- LANL-issued CRYPTO-Card for pass-code purposes

1.4 User Support

User support for WCATS is available from the Waste Help Team, which can be contacted through one of the following ways:

- Send an email to wastehelp@lanl.gov.
- Call 665-2494
- Submit help desk ticket from within WCATS through the help menu

You can report application bugs or request assistance with the application, updates to reference data, additional permissions, etc. Messages left on the Call Center's voicemail and emails sent to Waste Help are automatically entered into the customer issue tracking system.

2 Getting Started Using the Desktop Application

. This chapter gives users an overview of the Waste Compliance and Tracking System (WCATS) application, explaining basic concepts, terminology, and how the application's parts function. It also provides user tips.

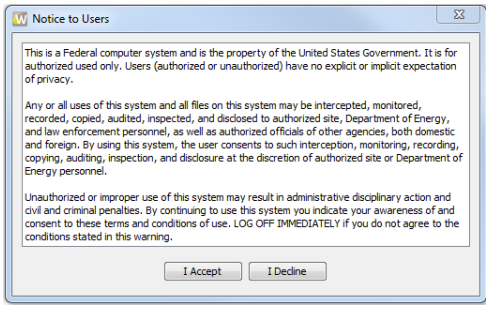
2.1 General Concepts

To make the application a more user-friendly experience, the developers have included a few key general concepts. By identifying these general concepts, we hope that users can familiarize themselves with the application and feel confident in using it to help with their everyday waste operations.

2.1.1 Application Website

WCATS is launched via a website, https://wcats.lanl.gov. This website provides a link to the application as well as the user's manual. To launch WCATS, click the Launch WCATS link. This will download the latest version of WCATS to the user's machine. If the application does not initiate properly, see Section 1.3, *User Support.*

2.1.2 DOE Users Notice



WCATS is a DOE-authorized application. At its commencement, the notice shown here will be displayed.

The application can only be used when the user accepts the conditions. If the user does declines or closes the window, the application will be terminated.

2.1.3 Login Screen

To authenticate a user as an official LANL employee, all users must log in to the application. The Log in screen requires a user to log in with a Z number and an administrative access CRYPTO Card-produced pass code.

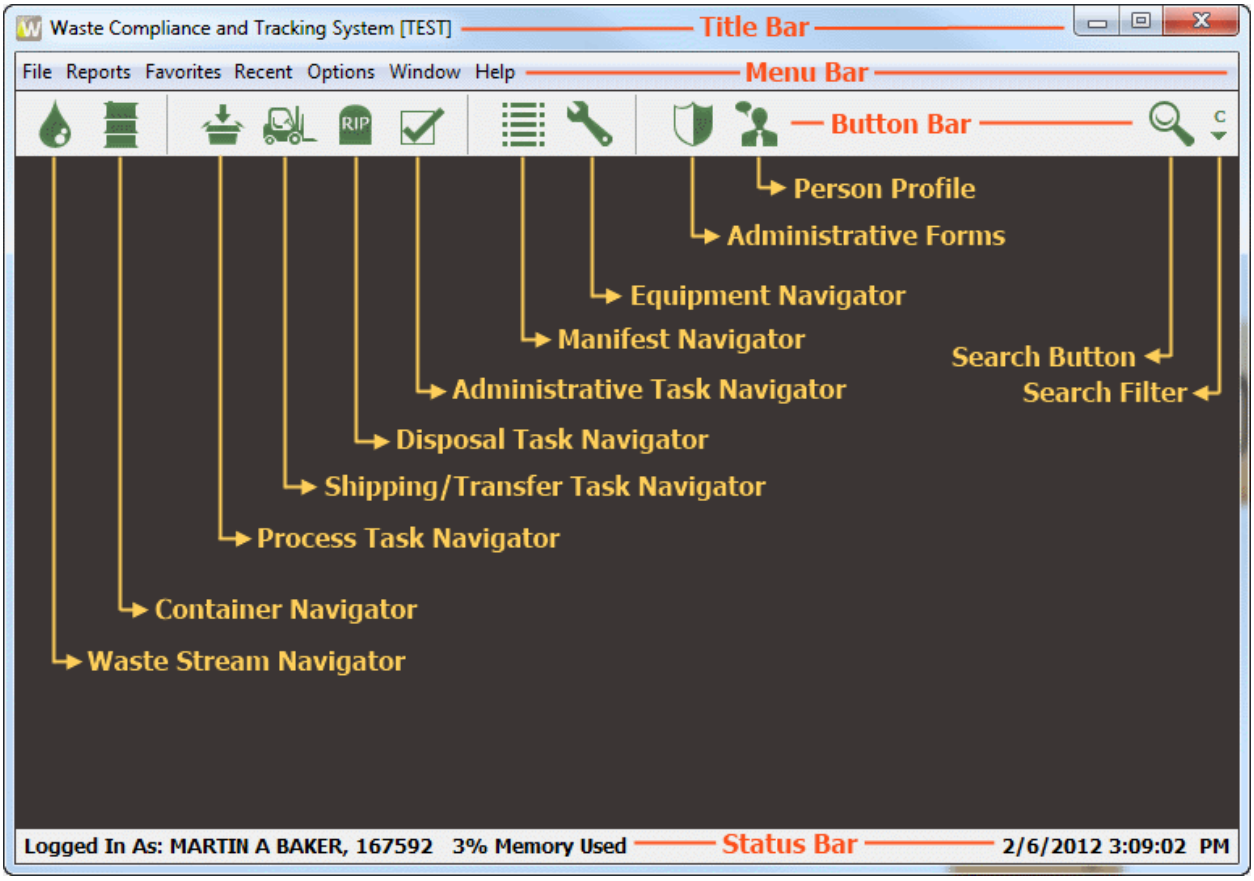
Once a user is logged in, the main application screen will appear.

Note:

- If the user's information has been entered incorrectly, a notice will appear indicating an error has occurred.

- The user is allowed 3 unsuccessful login attempts before the application becomes blocked from use. If blocked, the user will not be allowed to attempt login for 15 minutes. If you become blocked from the system, verify that your CryptoCard works on another application. If additional help is required, contact Waste Help at 5-2494 or wastehelp@lanl.gov.
- For your convenience, WCATS pre-populates the Z Number of the user who is logged in to the computer. If this is not your Z number, click the 'Not You?' Button to clear the fields and enter your correct information.

2.1.4 Application Main Screen



Once the user has successfully logged in, the main application screen opens.

The application main screen contains a title bar, menu bar, tool bar, and status bar.

Through the main screen the user gains access to a multi-document interface that holds a variety of smaller screens necessary to waste operations.

Other screens include navigator screens and profile screens. Navigator screens list records for containers, process tasks, waste streams, shipping tasks, equipment, etc. Navigator screens are a primary way of finding items to work with.

Profile screens give information about a specific item that can be accessed through one of the navigator screens, such as a container, a piece of equipment, a task, etc. Profile screens allow users to view information about and perform tasks on an individual item.

2.1.4.1 Title Bar

The title bar is consistent in all forms viewed in the application and resembles the typical Windows title bar. The title bar contains the WCATS icon, the window title, and icons to minimize, maximize/restore, and exit.

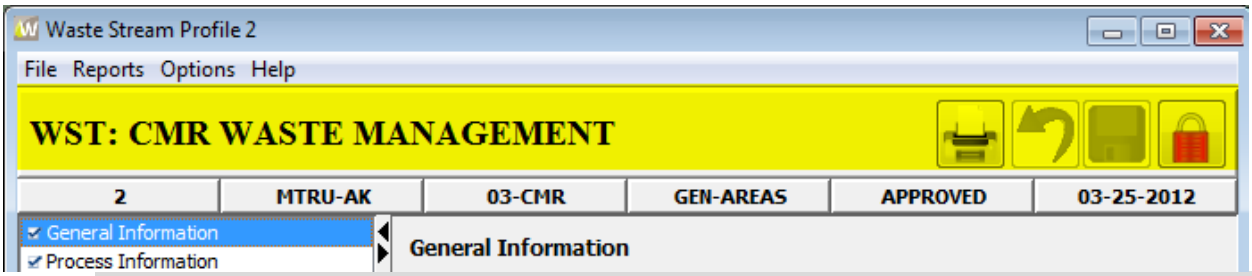
2.1.4.2 Menu Bar

The menu bar resembles the typical Windows menu bar. Although some screens contain more options on the menu bar than others, two key options are displayed on all applications: File and Help. Others, like the one shown in Figure 1-5, contain items such as Reports, Search, Options, and Window. Each screen has options available that provide a drop-down list with items to support that screen.

2.1.4.3 Tool/Button Bar

Many WCATS screens have a tool bar or button bar. Each tool/button bar meets the needs of the specific area in which it resides. The main application screen button bar shown in Figure 1-6 contains icons that represent the various navigator screens that comprise the application.

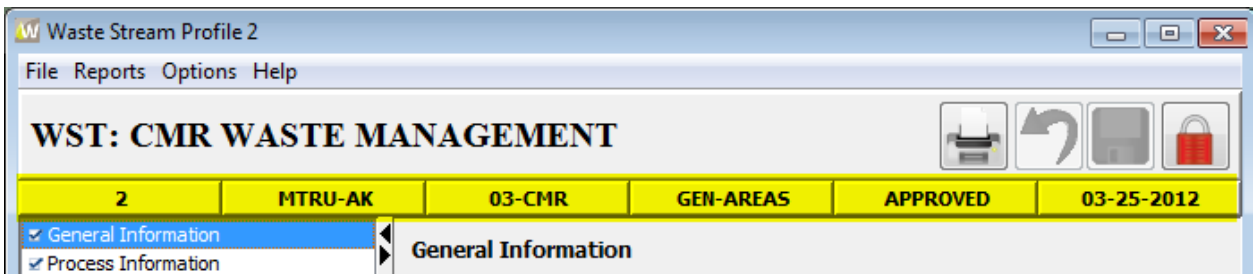
On other screens, such as a profile screen, tool bars contain profile identification information as well as icons that represent actions that will help in the execution of required tasks pertaining to the profile.



Note: See the glossary of icons for more information on icons displayed in the toolbar.

2.1.4.4 Header Bar

Within each profile, there is also a header bar that displays important information pertaining to the specific profile being viewed. Many of the header bars also display the current status of the open profile.



For example, the waste stream profile header bar shown here contains six columns of information. The first holds the waste stream ID; the second, the waste type; the third, the generating facility; the fourth, the generating unit; the fifth, the waste stream status; and the six, the expiration date.

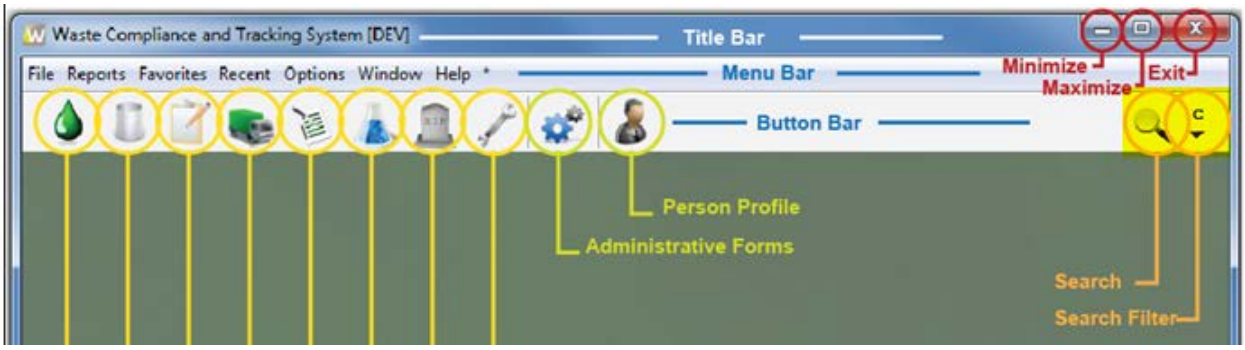
Every profile's header bar is customized for that profile type: shipping task, process task, etc. all have different header bars, some with more columns, depending on how much information is needed for that profile type. If you have a question about what information is in a header bar, allow the mouse pointer to hover over the column in question and a label will pop up identifying the information that column is tracking.

2.1.4.5 Status Bar

On the bottom of the main application page is the status bar shown in Figure 1-8. The status bar displays the name of the logged-in user, the user's Z Number, the amount of memory being utilized and the WCATS date and time.

2.1.4.6 Quick Search

For your convenience, WCATS provides a quick search option from the main page of the application. By utilizing the quick search icon, users can effortlessly locate any waste stream, container, task, equipment, or person profile within the WCATS application.



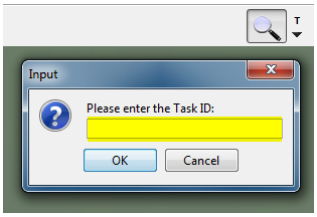
To locate any one of these mentioned profiles, perform the following tasks:

1. From within the WCATS application main page, click the search filter down arrow to display the drop down list of filter options.

2. From the list provided, select a search filter.

3. Once a filter has been selected, click the search icon to deploy the input dialog box.

4. Depending on which search filter has been selected, enter the requested information and click ok to execute the search.



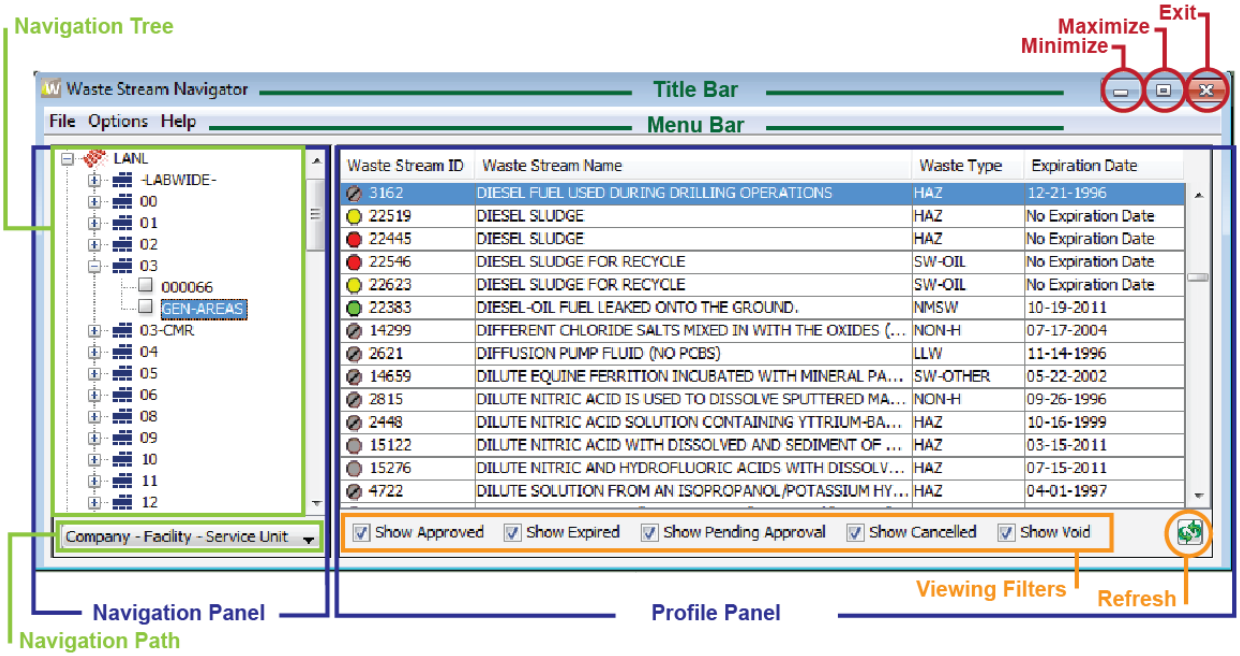
5. Once the requested profile is found, the profile will display for viewing.

Note:

- If the profile requested is not found, an error message will appear.

2.1.5 Navigators

To gain access to any of the subsystems, a user must click the desired navigator icon in the toolbar. A navigator screen like the one shown here will then deploy.



The navigator screen is split into two panels: the navigation panel and the profile panel. The navigation panel contains a navigation tree that allows the user to sort through data clusters. When a cluster of data is selected in the navigation panel, the information within that cluster is displayed in the profile panel.

Note:

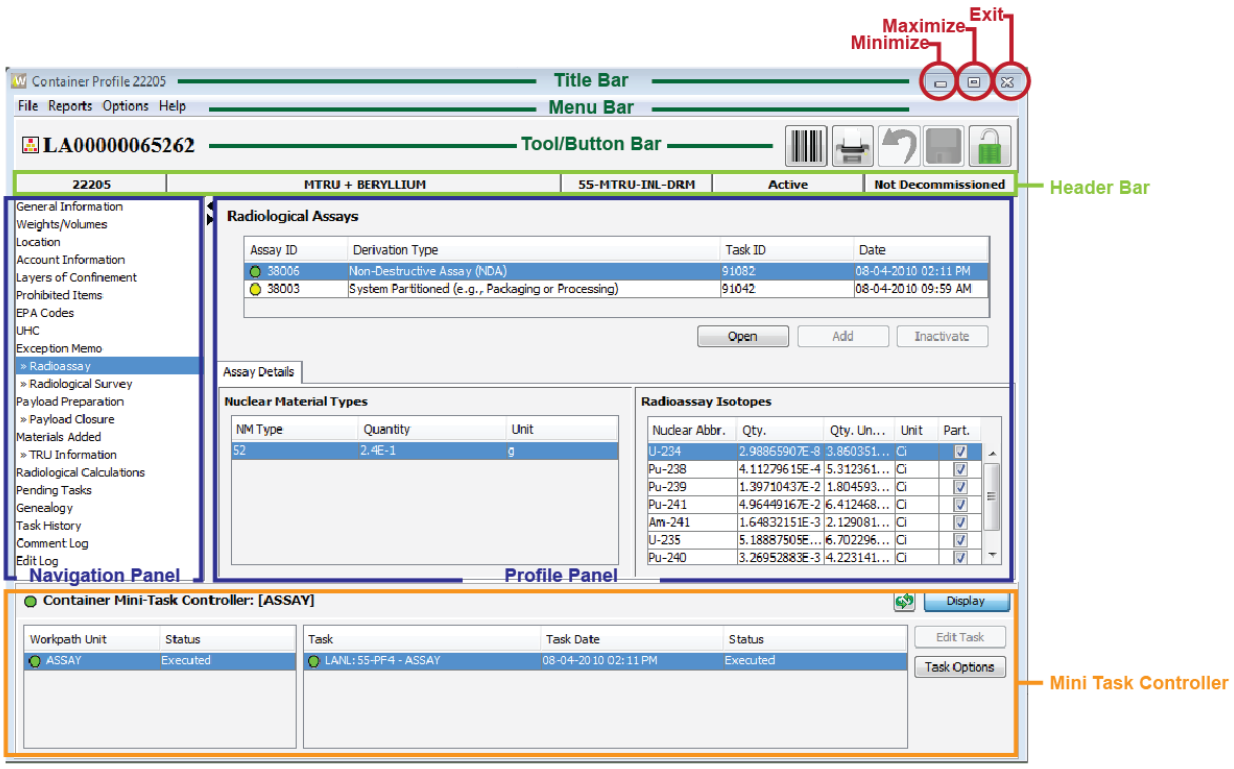
- To expand any branch of the navigation tree, click the plus sign to the left of each cluster.

- Navigation paths can be selected via the provided drop down list beneath the navigation tree.
- The panel and column widths can be resized for lengthy data by clicking on the divider line and dragging it to the right or left to resize that column.
- Options to filter the displayed records are provided with check boxes on the bottom of the profile panel.
- Click the refresh icon in the bottom right corner to refresh the data within the profile panel.

2.1.6 Profiles

Double-clicking on a record in a navigator opens that record's profile screen.

Like the navigator screen, the profile screen is split into two panels: the navigation panel (at left) and



profile panel (at right). The navigation panel contains the titles for each of the available profile panels within the open profile. If the user clicks a title, the corresponding profile panel will then be displayed. In the example shown above, Radioassay is selected in the navigation panel and displayed in the profile panel is the Radiological Assay data.

Some profiles, such as the example provided, contain a mini task controller. This area allows users to complete applicable tasks via the open profile.

Each profile also contains a header bar which provides pertinent information on the open profile for quick review.

Note: All WCATS screens behave like that of any other Microsoft application with minimization, maximization, dragging, and resizing capabilities.

2.1.6.1 Unlocking and Editing Profiles

Once a profile has been created, it can be reopened and unlocked for editing by any authorized user, at any time prior to being executed. To unlock and edit an open profile, perform the following tasks:

1. Within an opened profile, click on the red lock button in the upper right corner.
2. In the input request dialog box, enter a valid reason for requesting authority to alter the profile.
3. Click ok to submit the request and unlock the profile.

Note:

- If access has been authorized, the lock icon will now be seen as a green open lock and all editable attributes will be enabled.
- If access has been denied, an error message will appear stating the user is not authorized to edit the open profile. If access has been denied, contact Waste Help for more information at 5-2494 or at wastehelp@lanl.gov.

4. Once the profile has been successfully unlocked, editing on applicable profile panels can then take place.

2.1.6.2 Recent and Favorite Profiles

For your convenience, WCATS will remember and/or bookmark frequently viewed profiles.

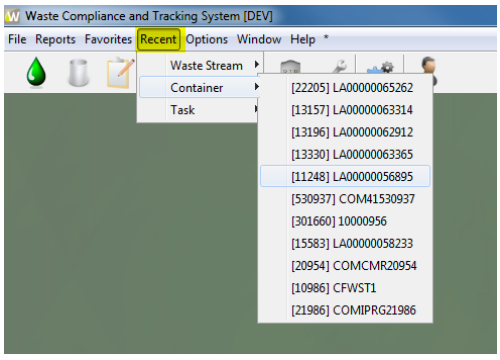
To view a recently viewed profile, perform the following tasks:

1. From the WCATS main application page menu bar, click the recent option.
2. From the drop down list provided, select the type of profile.

Note: Types of profiles shown are those which have recently been viewed (i.e. container).

3. From the pop out list provided, select the desired profile to view.

Note: Recent profiles are cleared weekly.

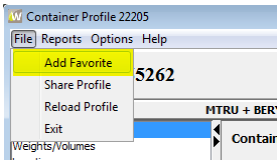


To add a profile to the list of favorites, perform the following tasks:

1. While in the open profile, click the file option from

the menu bar.

2. Under file, select add favorite.
3. Once marked as a favorite, the profile will be stored for selection under the *'Favorites'* option in the main screen menu bar.

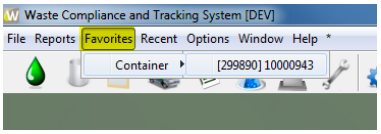


Note:

- Favorites are stored according to type (i.e. container) within the *'Favorites'* option on the menu bar.
- A profile can be removed from the favorites list by selecting remove favorite from the file option of the open profile's menu bar.

To view a favorite profile, perform the following tasks:

1. From the WCATS main application page menu bar, click the *'Favorites'* option.
2. From the drop down list provided, select the type of profile.



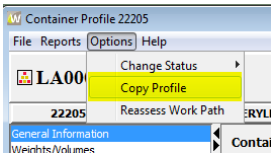
Note: Types of profiles shown are those which have recently been viewed (i.e. container).

3. From the pop out list provided, select the desired profile to view.

2.1.6.3 Copying Profiles

For your convenience, WCATS offers a copy option so that profiles containing similar information can be reproduced with ease. The copy option only applies to container and waste stream profiles. To copy a profile for duplication, perform the following tasks:

1. Within the open container/waste stream profile, select the options option from the menu bar.
2. From the drop down list provided, select copy profile.
3. Verify you would like to copy the open profile by clicking yes in the dialog box displayed.



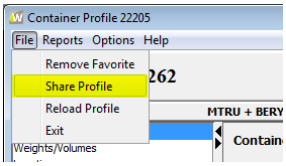
Note: When copying a waste stream profile, an option to change the generating location is provided.

4. Once the profile has been successfully copied, the new, copied profile opens for viewing/editing.

Note: Not all information will be carried over. Ensure that all required data is entered for the duplicated profile before continuing.

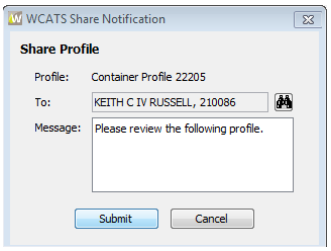
2.1.6.4 Sharing Profiles

Users can share an open profile with fellow authorized users via the share profile option. To share an open profile, perform the following tasks:



1. Within the open profile, select file from the menu bar.
2. From the drop down list provided, select share profile.
3. In the WCATS share notification dialog box, select a recipient using the person finder form by clicking the search button.
4. Inside the person finder form enter the contact's last name, first name, and/or Z number into the related fields.

   Note: To clear all fields, click the refresh button located next to the search button.
5. Once the data has been entered, click the search button to load all available contact options.
6. Once a contact has been selected, click the ok button to enter the data into proper field.
7. In the field provided, enter the message you would like to accompany the shared profile.
8. Click the submit button to send an email with the input message along with a direct link to the open profile.



2.1.6.5 Reloading Profiles

If data has been changed on a profile currently being viewed the profile can be opened via the file option of a profile's menu bar. The reload profile option will refresh the information to an updated state assuring complete accuracy when reviewing and editing a profile.

2.1.6.6 Saving Profiles

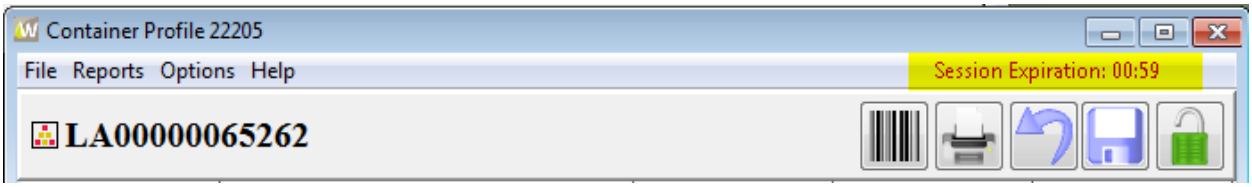
A good rule of thumb for using WCATS is "**save early and save often**."

WCATS offers a roll-back option for mistakenly entered data. When users click the roll-back icon, it undoes whatever the user has done since the last save. Saving often, while entering data, keeps the roll-back option from deleting essential information. Saving often can save the user a great deal of time that might otherwise be spent redoing an entire task.

To save a profile, simply click the save icon in the profile's button bar.

2.1.6.7 System Transaction Timeouts

To reduce data conflicts, WCATS has a timeout feature. This feature allows multiple users to work on the



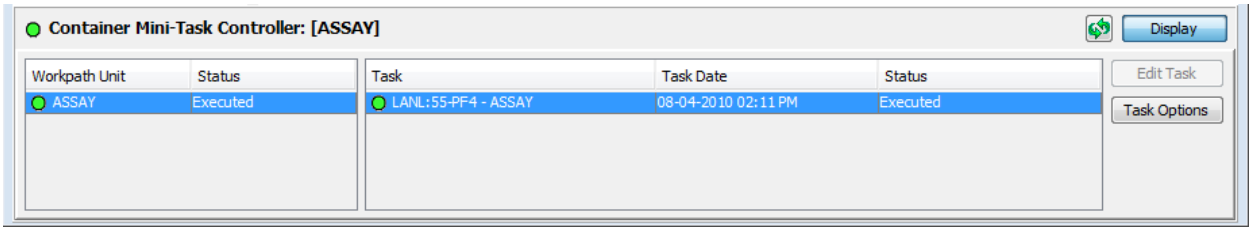
same profiles without data conflicts.

The timeout period is one hour. After one hour of inactivity, an open profile will revert to the last saved data. The timeout period, which is shown in the profile screens as 'Session Expiration' (see below) is reset each time the user saves. Saving often keeps users from having an automatic timeout interfere with their work.

2.1.6.8 Mini Task Controller

The mini task controller is a pop out feature provided within a container profile, enabling the user to execute applicable mini tasks. Mini tasks are characterization tasks, such as drum prep, visual inspection, and radioassay, which are associated with TRU and MTRU container profiles. These tasks require an approval upon execution and are required to thoroughly process TRU waste.

To display the mini task controller in any applicable profile, click the display button located in the bottom right corner.



Workpath unit information is provided in the leftmost table. Here users can identify the required tasks associated with the open profile, along with the status for that task. Within the task table, users can view the created tasks, along with creation date and status, related to the selected work path unit.

In order to perform a mini task, the opened profile must be unlocked for editing. Once unlocked, users can create a new mini task as well as open, review cost codes for or revoke a previously created mini task, via the task options button. Any previously created mini task can also be edited via the edit task button.

Note: Mini tasks can only be edited prior to execution.

2.1.7 Profile Panels

Each profile shows information in multiple panels. This section describes the panels that are in common between all profile types.

2.1.7.1 Comment Log Panel

The comment log is provided for users to make and/or view applicable remarks pertaining to the corresponding profile. To enter a comment into the comment log for any WCATS profile, perform the following tasks:

1. From the profile's navigation panel, select comment log to deploy the comment log profile panel.
2. Click the lock icon to unlock the profile for editing.
3. Within the input request dialog box, enter a valid reason for unlocking the profile and click ok.
4. Once the profile has been unlocked, click the add button to insert a new comment.
5. In the comment dialog box provided, enter the desired comment and click ok.

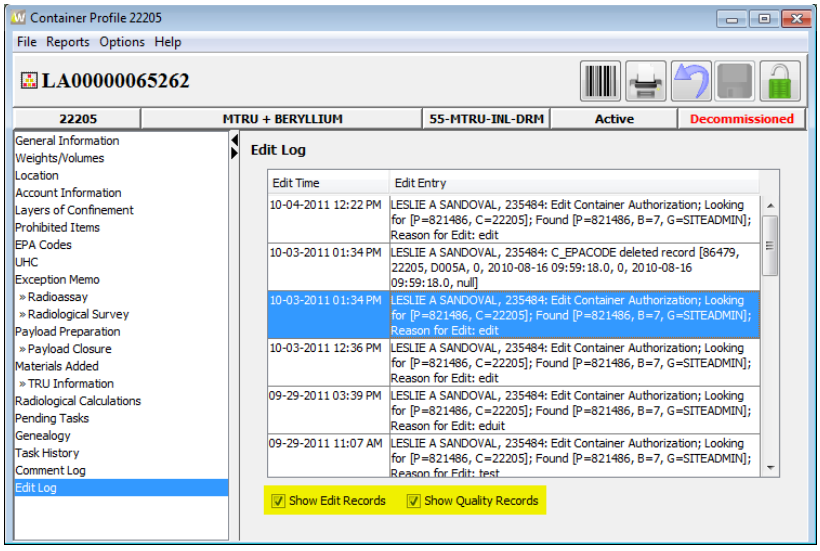
   Note: If a comment has been entered incorrectly, click the undo button before saving to remove from the log.

6. Once the comment is entered properly into the comment log, click *'Save'* to lock all entered data.

Note:

- Notice, the comment log displays the comment date and time, the commenting user, and the comment inserted.
- **NOTICE: Once saved, all comments are permanent and visible by all authorized users.**

2.1.7.2 Edit Log Panel

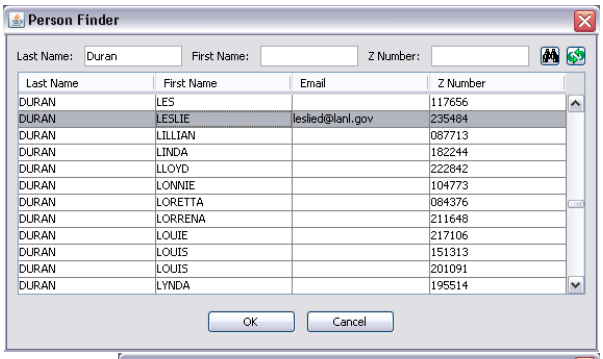


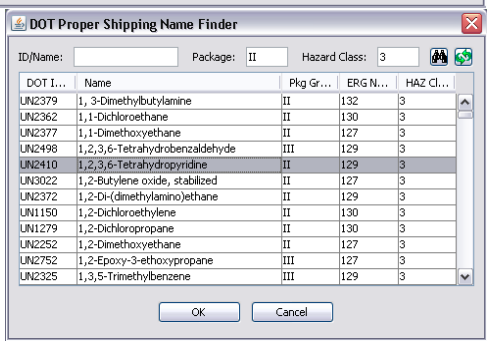
The edit log provides a detailed record of all modifications made to a profile. Once information is recorded in the edit log, it cannot be removed.

Within the edit log, users are provided the date and time, along with relevant information pertaining to the changes made.

Filters are provided below the edit log to customize the visible entries. Records are characterized as either an edit record or quality record. Edit records supply information regarding each time the profile is unlocked. Quality records supply information regarding any data change after the initial creation. To enable either filter, simply check the corresponding box.

2.1.8 Finder Screens





Finder screens are provided for the user's convenience to assist in searching for an item, such as a technical contact. In the figure to the right, there are two examples of a finder screen. One is a Person Finder screen for identifying contacts and the other is a DOT Proper Shipping Name Finder screen to identify proper shipping names for waste items.

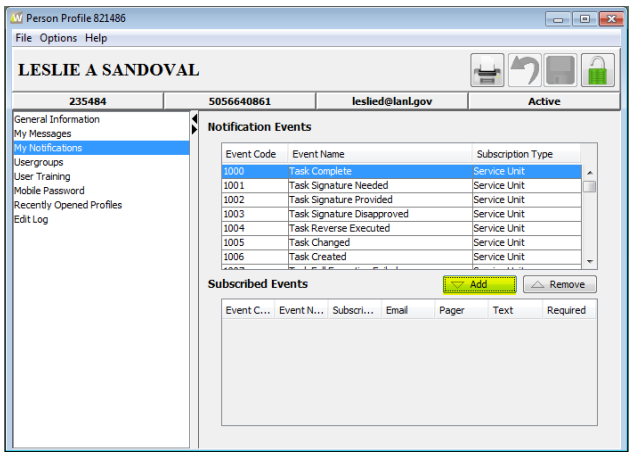
Finder screens are deployed when the user clicks on the search icon next to input fields. Inside the finder screen, criteria can be entered to populate a list of options for selection. The more specific the user is when entering criteria, the more precisely the selection list populates.

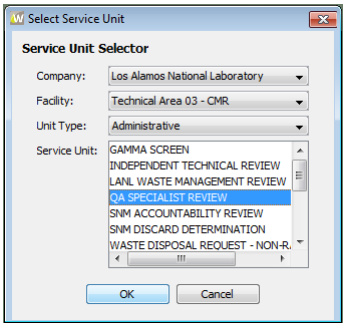
2.1.9 Notifications

WCATS gives users several options for receiving messages and alerts concerning the system's operations. Users can opt to be automatically notified when certain tasks are completed, when their signature is required on a task, etc. Notifications can be sent as an email, a text message, a page, or simply be system messages that are available the next time the user logs in to WCATS.

The following steps give detailed instructions on setting up notifications.

1. From within the WCATS main application page, click the Person Profile icon in the button bar.
2. From the navigation panel, select my notifications to deploy the 'My Notifications' profile panel.
3. Click the Lock icon to unlock the profile for editing.
4. Within the input request dialog box, enter a valid reason for unlocking the profile and click ok.
5. Once the profile has been unlocked, select the desired event from the notification events table provided and click add.

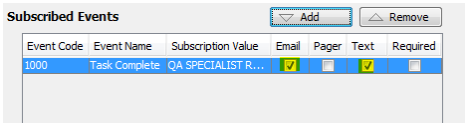




6. In some instances, a service unit selection box will deploy. Select the appropriate company, facility, and service unit for the event, and click OK.
7. Once the event is added to the subscribed events table, select the desired method of notification by checking the related box.

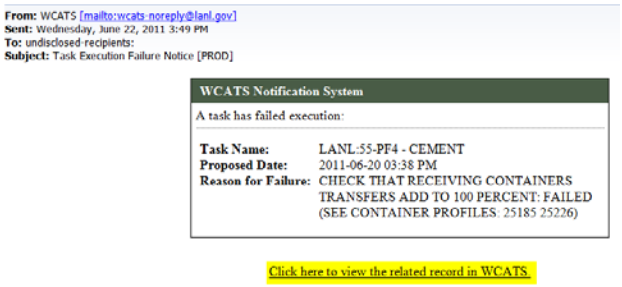
Note: As many methods as desired can be selected.

8. Once all options have been selected, click the save button to lock all entered data and to enable the added notification.



Note: To remove an event from your notifications, simply select the desired event from the subscribed events table and click remove.

Once a notification is enabled within the system, users will begin receiving applicable notifications immediately. Each notification is accompanied with the task/profile identification along with reason for notification for quick referencing. Email notifications are accompanied with a hyperlink to the related task/profile for viewing on the desktop application.



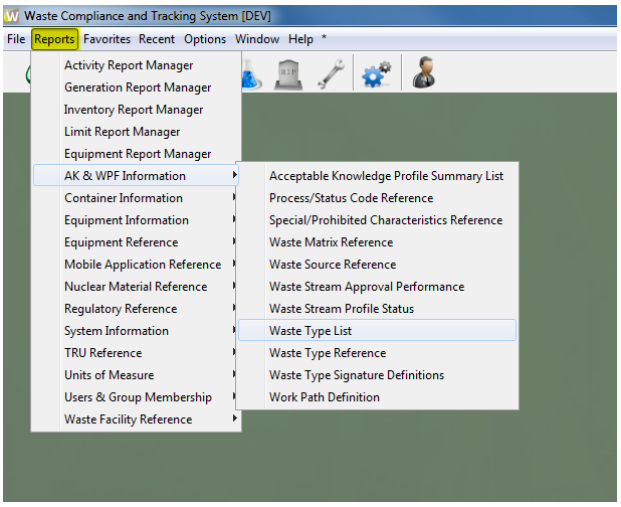
Notifications for Waste Help inquires are also provided. When a waste help ticket has been submitted via the WCATS application, a reciept is sent out for documentation.

Note: All WCATS notifications are sent out from the email address: wcats-noreply@lanl.gov. Confirm that this address is not blocked or filtered by your email provider to ensure all notifications

are properly received.

2.1.10 Reports

WCATS provides many different types of reports. Every profile has a print icon located in the button bar. When clicked, the profile report for that specific profile is then produced for printing. Some profiles, such as task or container profiles, may have additional reports available such as Waste Data Form reports or task-specific reports.



In addition to the profile reports, there are pre-defined reports which can be accessed from the main screen in WCATS, under Reports on the Menu bar. See Appendix C for more information on reports.

3 Using and Maintaining Mobile Devices

3.1 Overview

WCATS operations can be performed on mobile devices to support the field work that is typical of handling waste. With the mobile device, users can carry complete and up-to-date information to the sites where they perform their work, allowing for greater accuracy and speed of data transactions. These mobile devices support a range of operations to be performed on many different types of waste.

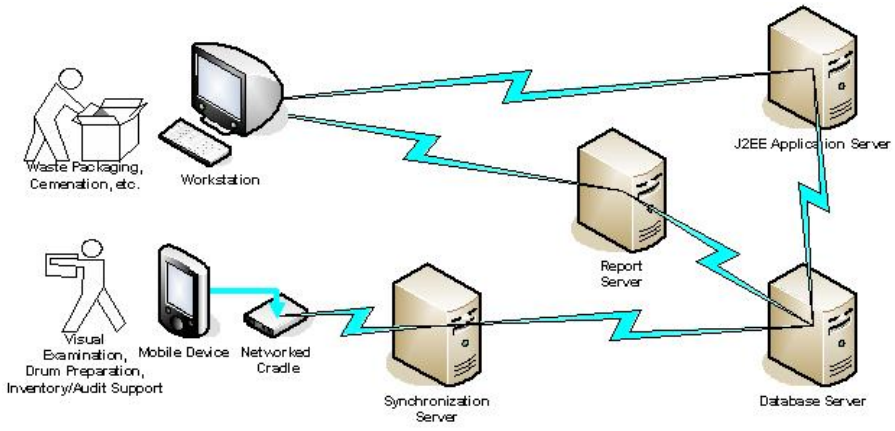


Figure 3-1

WCATS is synchronized to mobile devices via networked cradle which communicates with the synchronization server. See Figure 3-1 for a simplified view of this architecture.

3.1.1 Using WCATS in a Secure Area

Some work on the WCATS mobile devices is completed in secured areas where LANL security procedure compliance is of utmost concern. The following must be obtained for both the PDA and printer before using the application (See LIR 406-00-01, Attachment 12). Any questions pertaining to LANL PDA security should be directed to your Organizational Computer Security Representative (OCSR).

- Government property sticker OR government property number label to ensure security personnel can verify the device is government and not personal property
- "Unclassified" stickers
- Anti-virus software if commercially viable (deemed not viable at the time this document was published)

3.1.2 Mobile Device Applications

The Main WCATS screen shows a list of available tasks offered within the mobile device. The following table describes the available tasks.

Task	Description	Section
Waste Identification	Create new waste items or containers and document all required information (Includes all Non-TRU waste types)	5.2.1
TRU Visual Inspection	Identify and create new TRU or MTRU items (TA-55 and CMR only)	5.3.1
TRU Drum Preparation	Identify new empty drums for use in TRU and MTRU operations (TA-55 and CMR only)	5.3.3
Consolidation/Packaging	Consolidate or package waste belonging to non-TRU waste types	6.2.1
Intra-Facility Transfer	Move waste within a facility (e.g. to another building or room at the same TA)	8.4
Inter-Facility Pickup	Move waste to a different facility (e.g. another TA)	8.3
Disposal Tasks	Dispose of waste that is already present at a disposal facility	9.3
Administrative Tasks	Perform inspections or other administrative tasks	10.5
Wall-Wall Inventory	Verify the inventory of a building or other storage unit by scanning each container	10.6
Equipment Management	Update equipment certifications and view equipment information	12.4
Audit Support Tool	View container history and re-print small container barcode labels	5.1.1

3.2 Using the Mobile Device

There are three mobile devices models currently in use with WCATS. For more information on these, a link is provided below each model to the device's user manual.

Psion Workabout Pro 3

http://wcatshelp.lanl.gov/files/WAP3_USER_MANUAL.pdf

Psion iKon

http://wcatshelp.lanl.gov/files/IKON_USER_MANUAL.pdf

Psion Workabout Pro 4

(no official manual available at this time)

3.2.1 Mobile Device Battery Charging

Following proper mobile device assembly (see device user manual), it is essential for operation that your mobile device is charged safely and completely.

1. Charge the battery pack for at least 6 hours before startup using either the power adapter or docking cradle. Make sure the PDA is firmly seated in the dock or power adaptor.

   Note: Carefully but forcibly push the PDA into the docking cradle whenever docking. This is to ensure a positive connection while maintaining connection parts.

2. The battery LED indicator blinks green while charging, and is a constant green when completely charged.
3. Charge the battery at 41°F - 104°F.
4. If you remove the battery or the battery completely discharges, there is a two-hour window in which to insert a charged battery or cradle the device before the backup battery fails and the contents of the Flash memory are lost.
5. See Batteries in the device user manual for additional safety details.

3.2.2 Powering Up the Mobile Device

To power up the mobile device perform the following tasks:

1. Be sure the device has been properly charged.
2. Tap the device's screen or hold the power button down until the screen is activated.
3. Tap and hold down the lock icon, then slide it to the left or right.
4. Log in by entering your password and then selecting OK in the top right corner. The Start screen appears.

   Note: Users must log in at the Afaria screen in order to access the device. The password here is device-specific and will be known to users of the device. If you lose the device password, notify wastehelp@lanl.gov.

3.2.3 Logging in to the WCATS Application

To access the WCATS application, perform the following tasks:

1. Within the main mobile device screen ("Start" is shown at the top), tap the 'WCATS' link in the bottom-left of the screen.
2. Once WCATS has opened, a DOE notice will appear. After reviewing the notice, click accept to access the application.

Once accepted, the task selection screen will appear.

3.2.4 Synchronizing the Mobile Device

The hand-held mobile device allows operators to record information as they work in the field. This information is not available in the main WCATS database until the device is returned to its cradle and synchronized. The steps below describe how to synchronize the mobile device.

Note: It is a best practice to synchronize the mobile device before and after using it in the field. This will ensure that your data is kept up-to-date.

1. Insert the mobile device in the cradle.
2. Navigate to the Task Selection or Login screen and tap the Synchronize button. The Synchronize screen appears.
3. Wait until the device finishes synchronizing. The status message and progress bar will display the status of the synchronization.

Note: When synchronizing, you do not need to log in first.

4. Select 'Close' to finish and review any messages.
5. If you receive an error or conflict message, go to section 4.6.4, Resolving Synchronization Conflicts, or see section 4.6.5 for error messages.

Note: After the mobile device has been synchronized, executed tasks can no longer be modified on the mobile device. Items and containers are removed from their pending state, but they can still be modified on the mobile device or from within the WCATS Desktop application.

3.2.4.1 Resolving Synchronization Conflicts

Conflicts can arise when users attempt to upload data to WCATS on the same task or container, whether on the desktop or another mobile device. The first user to save a record (or synchronize a mobile device) will have that data entered into WCATS, but the second user will receive a conflict error message. This section deals with conflict error messages and other synchronization errors and how to resolve them.

Note: Conflict error messages from WCATS usually contain the action recommended to resolve the conflict. Always communicate with other team members about conflicts to make sure that the correct action is taken to resolve the conflict without losing the correct information.

1. If a sync warning appears, read the message.

Note: WCATS also sends the user an email notification with a link to the item on the desktop application. The user can click the link to get to the item in WCATS, and then look at the Edit Log to see which user was the last person to work on that item.

2. If the sync warning is about a container conflict, do the following steps.
    a. Write down the container id.
    b. Log in to the WCATS Desktop Application.
    c. Open the container record (use find container by id).

d. Review the information in the Container Profile's 'Edit Log' WCATS for the name of the last user to update that record.

e. If needed, contact the other user(s) involved to resolve the conflict, and determine whether rework is needed.

f. Rework the container as needed on either the desktop application or on the mobile device.

g. If rework was done on the mobile device, synchronize the device to update WCATS with the rework data.

3. If the sync warning is about a task conflict, do the following steps.

   a. Write down the task id.

   b. Log in to the WCATS Desktop Application.

   c. Open the task record (use find task by id).

   d. Review the information in the Task Profile's 'Edit Log' WCATS for the name of the last user to update that record.

   e. If needed, contact the other user(s) involved to resolve the conflict, and determine whether rework is needed.

   f. Rework the task as needed on the desktop application.

4. To resolve conflicts with labeled IDs, do the following steps.

   a. Write down the labeled ID number.

   b. Tap the OK at the top of the Sync Warning screen. The screen closes.

   c. Tap the Dismiss button to return to the main screen.

   d. Go to the WCATS desktop application to get more information.

   Note: Review the information in WCATS for the name of the last updater to that record. If needed, contact the other user(s) involved to resolve the conflict, and determine whether rework is needed.

   e. Rework the ID as needed on the desktop application.

3.2.4.2 Resolving Synchronization Error Messages

Errors can occur when users attempt to upload data to WCATS. This section gives users instructions on how to resolve synchronization error messages.

Note: The WCATS error message can tell you what caused the error, like a faulty network connection, or it may only give you information on the status of the upload as a result of the synchronization error.

1. Insert the mobile device in the cradle. The last screen the user was on appears.
2. Navigate to the Login screen.

a. Tap the File menu at the bottom of the screen and select either save and Submit Waste Item or Exit without Saving, whichever is appropriate. The Select a Task screen appears.

b. Tap the OK in the top right corner of the screen. The Login screen appears.

3. Tap the Synchronize button. The Synchronize screen appears.
4. Select OK to synchronize the device's data with WCATS.
5. If an error message appears, read the message.
6. If the error is a network connection error, then do the following steps.

a. Tap the OK in the upper right corner of the error message box. The message closes, revealing the Synchronization screen.

b. Tap the Dismiss button to return to the main screen.

c. Remove the device from the cradle, reinsert it into the cradle, and do steps 1–4 again.

d. Check the connection.

Note: Check the network cable for the cradles to make sure that it still has a good connection.

Check that the network is not down in your area.

e. Repeat steps 1–4. If the connection is still down, you will eventually receive a second error message, Error during Upload.

f. Contact the Application Administrator at wastehelp@lanl.gov.

7. If the error message says the upload was successful but no data was downloaded to the device, and then do the following steps.

a. Tap the OK in the upper right corner of the error message box. The message closes, revealing the Synchronization screen.

b. Tap the Dismiss button to return to the main screen.

c. Remove the device from the cradle, reinsert it into the cradle, and do steps 1–4 again.

d. If you get the same error message, contact wastehelp@lanl.gov.

8. If the error message asks you not to remove the device from the cradle, then do the following steps.

Note: The Do Not Remove Device from Cradle error message can also indicate that a connection problem occurred after a good connection was initially established.

a. Tap the error message box. The message closes, revealing the Synchronization screen.

b. Tap the Dismiss button to return to the main screen.

c. If the device was taken out of the cradle, return it to the cradle, wait for the Login screen to reappear, and then repeat steps 1–4.

d. If the device has been in the cradle all during the synchronization, then remove the device from the cradle, reinsert it, and do steps 1–4 again.

e. If the same error message occurs again, contact wastehelp@lanl.gov.

3.2.5 Navigation

3.2.5.1 Digital Keyboard

The button in the middle of the bottom row toggles the digital keyboard

Each mobile device has a digital (software) keypad that can be used to assist with data entry. To open the device keypad, click the keypad button in the middle of the bottom of the screen. The keyboard also has functions for a numeric digital keyboard (top-left button) as well as a Shift toggle to enter special characters or capital letters.

3.2.5.2 Device Keypad

The primary mode of input for the device is the device's keypad. Some buttons, especially special characters, require the use of the shift button or the orange function key. The orange text above the buttons is entered by toggling the orange function key and uppercase characters or the white characters on the numeric keypad can be entered by pressing shift then the appropriate key.

Device Keypad showing shift key and orange Fn Key

3.2.5.3 Device Stylus

Each device comes with a stylus that allows a user to touch or tap different parts of the screen with a high amount of precision. Although the WCATS mobile application was designed to provide large input areas, use of the stylus will increase accuracy in selecting those inputs.

3.2.6 Creating a Mobile Device Password

To begin using the mobile application, a WCATS mobile password must be set up for the user using the following steps:

1. Log into WCATS desktop application to set up a password. The main screen opens.
2. Click the person profile icon in the button bar. Your Person Profile opens.
    a. Click the Lock icon to unlock the profile for editing. The Input Request dialog box opens.
    b. Type in a reason for the change, such as "set mobile password," then click the OK button.
    c. Select *Mobile Password* in the left navigation panel. The Mobile Application Password panel opens to the right.
    d. Read the password requirements, and then type a conforming password into the New Password field.
    e. Type the password again in the Confirm Password field, then click the Set Password button. The password is set.
    f. Click the Save icon to save the changes, then the Lock icon. Your mobile password is ready to use.
3. Ensure your PDA is properly connected to an Ethernet connection using a docking station.
4. Open the WCATS application and synchronize the mobile device.
5. You will now be able to log in with the password. Note that for some special characters the shift and/or function keys may be used to key in the password.

3.3 Using the Mobile Printer

The WCATS mobile printer can print out bar code labels when activated by the infrared transmitter in the mobile device from no more than four feet away.

SATO 2-inch Printer Used with WCATS

3.3.1 Safety and Caution Notes

If you do not intend to use the printer for a long time, remove the battery pack from the printer and unplug the AC adapter from the wall outlet. Do not put the printer in a hot or cold place. The operation temperature range is 32°F to 122°F (0 to 50°C) where humidity does not cause condensation. Do not put the printer in an area with high humidity or at a temperature outside the specified range. Do not drop or apply undue shock to the printer. The printer is generally resistant to vibration possibly caused during normal transportation. However, avoid applying extreme vibration or shock by dropping the printer. For safe maintenance or cleaning of the printer, be sure to remove the battery pack and the AC adapter from the printer.

3.3.2 Charging the Printer Battery

Follow the steps below to charge the battery:

1. Ensure that the battery has been properly inserted into the mobile printer.
2. Plug the AC adapter into the outlet.
3. Remove the DC input terminal cover on the left side of the printer and insert the DC output terminal.

   Note: When charging begins, the battery life indicator is red. The battery life indicator disappears (fully charged) when charging is complete. The optional battery charger set provided for this printer is specific to this printer. Do not use it for other electric equipment.

Charging time:

It takes about 5 hours for the battery remaining power display to turn off when charging a completely depleted battery.

3.3.3 Installing and Removing the Battery Pack

1. Open the battery cover.
2. While pressing the gray hook, insert the battery pack, then close the battery cover.

3. Insert the battery pack with the terminal Handle side toward the printer.
4. To remove the battery, press the gray hook to unlock it, then hold the handle and pull out the battery.

Note:

• Be sure to turn the power off before removing or replacing the battery pack. When the power is off, the Status LED turns off.

• Check that the Status LED has turned off before removing the battery pack.

• Removing the battery pack may prevent updating the information in the printer memory.

3.3.4 Turning the Power On

To turn on the mobile printer:

1. Hold down the Power button until the Status LED lights green, then release the button.

Note: The mobile printer will automatically turn itself off after a few minutes of inactivity.

3.3.5 Test Printing

1. To get the printer to enter the test mode, press the Feed button and hold down the Power button simultaneously.
    a. Press the Feed button again to start test printing.
    b. Press the Feed button again to stop test printing.
2. Verify the following using the output of the test print.
    - There are no chipped characters.
    - Printing condition is good.

Note: In test printing, the estimated remaining battery power is displayed as three solid bars (when completely charged.) When the remaining battery power shows only one solid bar, charge the battery.

3.3.6 Loading Labels

The label installation method differs by printing mode: continuous or dispense mode printing. Usually, operators will use the continuous mode for printing bar code labels.

Continuous Printing Mode

1. Slide the cover release lever in the arrow direction to open the cover.
    a. First, slide the dispenser unit to the continuous printing mode position.
    b. While pressing the label guide stopper, slide the label guide to the label size to be used.
2. Load the paper in the printer. Make sure the roll is oriented correctly.

3. Confirm that the label roll can be rotated easily by hand.

   Note: If rotation is labored, it can cause a feed error. Label guides do not require adjustment when using labels with the same width.

4. Remove the label roll and adjust the label guide.
5. Check that the label tip is protruding. Then close the main cover by pressing the middle of the cover. Close the main cover slowly, while pulling the cover release lever.

Switching from Dispense Mode to Continuous Printing Mode

1. Grip the Tear-Off bar, lift it upward slightly, and then slide it toward you.
2. Never pull it with the bar still engaged. This may damage the dispenser unit.

   Note: When using Dispense Mode printing, follow the procedure above to switch the dispenser unit to continuous printing mode before changing the paper. See image below for the specifications on the bar code label.

3.4 Mobile Hardware and Accessories

Certain accessories may be purchased for the mobile device. Contact Waste Help (see section 1.3) for assistance in ordering. The accessories include the following:

- Extended-life battery pack
- DC (automobile) car charging adapter
- Nylon Pouch and shoulder strap
- Pistol Grip
- Vehicle mount (with or without charging adapter)

4 Creating and Managing Waste Streams and WPFs

Los Alamos National Laboratory requires that all waste to be generated within its facilities is properly defined and categorized, prior to generation, using a catalog of waste streams. These waste streams serve as templates, developed by waste generators alongside waste management coordinators (WMCs), for accurately recording the necessary information required to appropriately dispose of the waste item.

4.1 General Concepts

The waste stream subsystem contains items specific to performing waste stream driven tasks. Within the WCATS waste stream subsystem users are able to electronically document and track all living waste streams used at LANL.

4.1.1 Waste Stream Navigator

The waste stream navigator contains the complete record of all WCATS created waste streams, as well as all Waste Profile Forms (WPFs) that have been migrated from the previous Legacy system. From this screen, a user can either select an existing waste stream to view and/or modify or they can create a new waste stream.

To open the waste stream navigator, click on the waste stream navigator icon in the main WCATS application page.

Note: Notice there are many viewing options within the waste stream navigator.

- Within the Waste Stream Navigator, waste streams are organized by WCATS' appointed Waste Stream ID, Waste Stream Name, Waste Type, and Expiration Date.
- To view waste streams by status, check the desired approved, expired, pending, cancelled, and/or void box below the table.
- Menu options for the waste stream navigator include file, options, and help.
- To refresh the list of visible waste streams within the navigator, click the refresh button in the lower right corner.

4.1.1.1 Search Paths

The navigation panel, on the left side of the navigator, is organized according to the specific search path selected in the drop down list in the lower left corner of the navigator. Search paths options include by generating unit, by waste type, by generator, by WMC, by pending signature, or advanced. The advanced search option allows the user to input more precise information such as the waste stream ID, waste stream name, waste type, facility, generator, and/or WMC associated with the specific waste stream desired.

Once a search path has been selected, using the navigation trees expand and contract buttons, the user can then navigate to the search path category where the desired waste stream is located. Once a category has been selected, the waste stream profiles available within that category are then displayed for selection within the profile panel on the right side of the waste stream navigator.

4.1.2 Waste Stream Profile

The waste stream profile contains all required information pertaining to a specific waste stream. The available profile panels, listed on the left side of the profile, are driven by waste type selection. When a desired panel has been selected from the navigation panel, the appropriate data fields are displayed within the profile panel on the right side of the profile.

The waste stream name is displayed on the title bar along with the button bar including the print, roll-back, save and lock/unlock buttons. Within the header bar, the waste stream ID, waste type, generating facility, generating unit, waste stream status, and waste stream expiration date are provided.

4.1.2.1 Waste Stream Profile Status

A waste stream profile can have one of five statuses: approved, expired, pending, cancelled, or voided. Within an open waste stream profile, the status of the waste stream is displayed in the fifth column of the header bar. Within the waste stream navigator, waste stream status is identified by a small colored circle next to the waste stream ID. A green circle identifies an approved profile, a yellow identifies a pending, a red identifies a cancelled and a circle with a line through it identifies either an expired or voided profile.

The status of a waste stream profile can be altered via the options option in the waste stream profile's menu bar.

4.1.3 Waste Profile Form

Once a waste stream profile has been successfully documented, an institutionally recognized waste profile form (WPF) can be printed out via the reports option within the waste stream profile's menu bar. The associated WPF accurately enters all data provided within the WCATS waste profile panels in to the proper WPF fields.

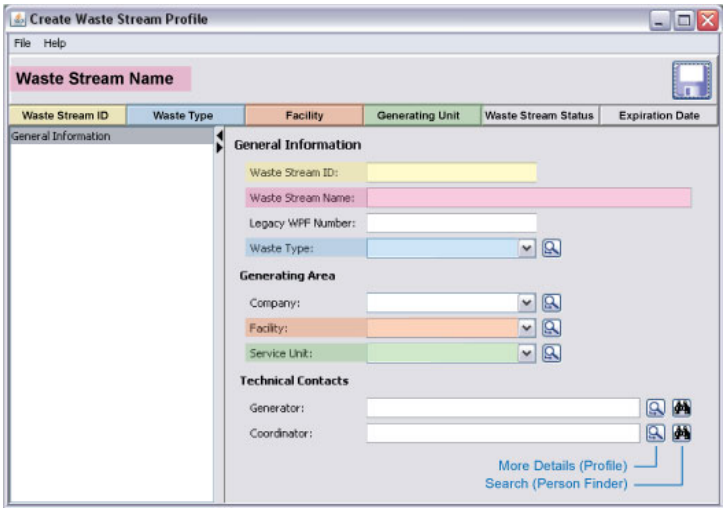
4.2 Creating a New Waste Stream Profile

To create a new waste stream, perform the following tasks:

3. Within the main WCATS application screen, select file │ new │ waste stream. The *'Create Waste Stream Profile'* form appears. (See Figure 4-1)

Note: Notice the header bar located at the top of the form. The information here correlates to that entered into the form.

Figure 4-1



4.2.1 Stage I: Entering Waste Profile Form (WPF) Information

The initial entry stage of the WPF waste stream creation is to be performed by a certified waste generator and/or a certified waste management coordinator (WMC). Although this stage can be performed by a WMC, it is the signature of the generator that completes the execution of all entry level panels. Once the generator signature has been executed within the reviewers panel of the waste stream profile, many panels will be locked from further editing and the profile will continue on to the reviewing stage (some information, such as cost codes and EPA codes, will still be available).

Note: Waste items described in the table below are considered exempt from the requirement to characterize waste using a WPF waste stream.

This is not a complete list of materials/items that do not require a WPF. If you have questions as to whether a WPF is required, please contact the ENV-RCRA group office at 667-0666.

Table 1

Waste Item	Description
Industrial wastewater discharges	These are point source discharges currently subject to regulation under Section 402 of the Clean Water Act and are discharged from an active outfall included in the Laboratory's National Pollution Discharge Elimination System (NPDES) permit. **Note**: If you have a question regarding whether or not a waste stream is exempt due to its regulation under Section 402 of the Clean Water Act and discharge under an active outfall included in the Laboratory's NPDES permit, please contact Water Quality at 665-0453 for further information.
Wastewater from restrooms, drinking water fountains, showers, and office-type kitchens	Wastes that are discharged via pipelines originating outside of a Radiological Control Area (RCA) controlled for contamination, but not including washing of laboratory glassware.
Regular office trash	Food waste, recyclable paper, cardboard, binders, surplus chemicals, plastic bottles, aluminum cans and foil, transparencies, toner cartridges sent for refill, and wood products; landscape debris; scrap metal; and excess furniture, equipment, or other materials sent for salvage.

4.2.1.1 General Information

The general information panel provides the foundation for the creation of a new waste stream profile. Once the waste type has been selected within the general information panel, the application can then identify which panels are required to produce a complete WPF waste stream profile. Profile panel options specific to the selected waste type will not appear until the general information panel has been saved.

To enter general information to a newly created waste stream, perform the following tasks:

1. Within the general information profile panel of the Create New Waste Stream Profile form, enter a proper waste stream name in the field provided.

   Note: Name the profile using one of the following templates: (a) [waste matrix] from [process], or (b) [waste matrix] with [contaminant] from [process]. Examples include "tar paper from re-roofing project" or "solvent contaminated concrete from glove box removal". NEVER specify the waste type (e.g. LLW) or TSDF (e.g., NNSS) destination in the profile name.

2. From the drop down list in the waste type field, select the waste type for your waste stream. The waste type characterizes the waste, and many selections are available. More information on a waste type can be obtained by clicking the magnifying glass next to the waste type. Ask your WMC if assistance is needed in selecting a waste type.

   Note:

   - To create a WPF waste stream, select a waste type that does not include the letters -AK following the abbreviation (e.g. MTRU). Waste types that include -AK, are considered Acceptable Knowledge waste streams. For more information on AK waste streams see section 4.2.3.
   - In the entry stage, waste type selection is based on estimation. Waste type assignment is not final until the review stage is complete.

3. From the drop down lists provided in the generating area section, select a company, facility and service unit for where the waste is to be generated. The service unit to be selected for waste streams is generally the building where the waste will be generated. The use of "GEN-AREAS" is restricted to waste generated outside of defined structures. If your structure is not shown in the list, contact wastehelp@lanl.gov to have it added..

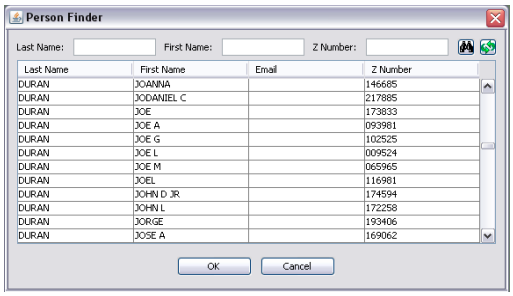
   Note: More specific generation location information pertaining to TA, building, and room will be requested in the area information panel.

4. In the technical contacts section, select a generator and coordinator for the waste stream by clicking on the search button to deploy the person finder form. If these need to be changed later, they can be modified via the menu bar by selecting Options | Change Technical Contacts.

   Note:

   - As a user logged on to the WCATS application, your workstation should automatically enter your information into the technical contact field.
   - If you don't have a WMC, contact Generator Support Services or Waste Management Coordinator group for assistance.

   Figure 4-2

5. Inside the person finder form (see Figure 4-2) enter the contact's last name, first name, and/or Z number into the related fields and click the search button.

   Note: To clear all fields, click the refresh button located next to the search button.

6. Once the data has been entered, click the search button to load all available contact options.

7. Once a contact has been selected, click the ok button to enter the data into proper field.
8. Click the save button on the toolbar to set the general information portion.
9. Once the success notice appears, click OK to continue.

Note:

- The waste stream ID and the Legacy WPF number are produced automatically by the application and can be seen upon saving.
- To view more details on any of the items in the profile panel, click on the view button represented as a magnifying glass next to the item to deploy the corresponding profile form.

4.2.1.2 Site Area

1. Click on *Site Area* in the navigation panel of the waste stream profile form for the Site Area profile panel to appear. (see Figure 4-3)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

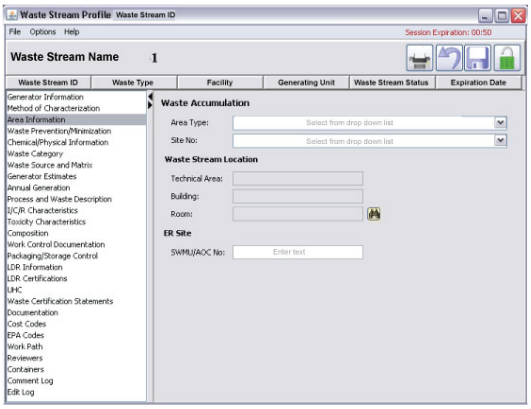
2. From the drop down list provided, select an area type for your waste stream.
3. In the field provided, enter a site identification number for the area type selected.

Note: If the either the "PCBs storage area" or "none of the above" option was selected, there may not be a site identification number to enter.

4. To select a waste stream location, click the search button to deploy the change TA/building dialog box.
5. From the drop down lists provided, select a TA and a building where the waste will be generated.

Note: Provide the technical area, building, and room number *where the waste is generated*, NOT where the waste is accumulated.

Figure 4-3



6. In the field provided, enter the room where the waste will be generated, if applicable.

Note: The room field is variable and not restricted to a room number.

7. Click ok to enter the location information into the Site Area panel.
8. If the waste is generated from an environmental restoration program, enter a Solid Waste Management Unit (SWMU)/Area of Concern (AOC) number in the field provided in the ER site section.
9. Click the save button to save all data entered into the waste stream profile.

4.2.1.3 Method of Characterization

Note: Analysis is required when:

- The waste has an unknown origin,
- A chemical reaction has occurred that may have created an unknown chemical compound,
- The waste requires a radiochemical analysis for determining if contaminated,
- The waste contains unknown chemical or radiological contamination, OR
- AK documentation does not provide sufficient information to characterize the waste. (See P409 Waste Management)

To select a method of characterization to a waste stream profile, perform the following tasks:

1. Click on method of characterization in the navigation panel of the waste stream profile form for the method of characterization profile panel to appear. (see Figure 4-4)

   Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

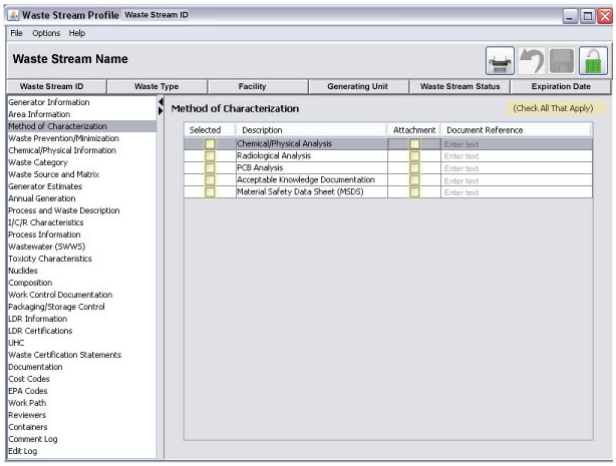
2. From the table provided, select all methods that apply to your waste stream by checking the respective box to the left hand side.

3. For each item selected, you must attach supporting documentation, check the box provided in the attachment column for the selected method and attach the document via the documentation panel of the waste stream profile. (see section 4.2.1.22)

   Note:

   - Certain hazardous waste types will need analytical attached to WPF for storage at Area L.
   - Request an analysis by contacting ENV-RCRA.

Figure 4-4



4. If a document was attached, double click in the document reference column to enter reference information pertaining to the document.
5. Click the save button to save all data entered into the method of characterization profile panel.

4.2.1.4 Waste Prevention/Minimization Information

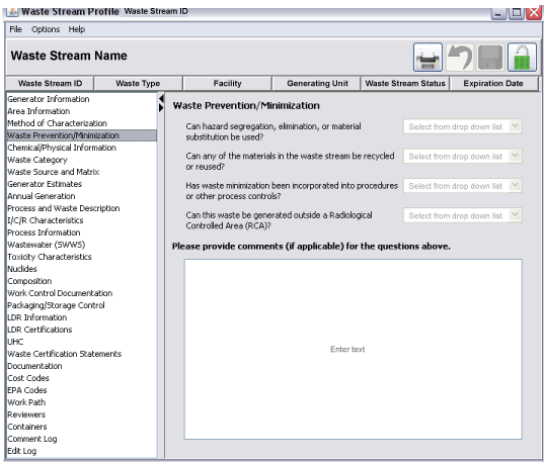
As required by the LANL Waste Certification Program (WCP) in P930-2 "Waste Certification Program" Module VIII, Section B.1, of the Laboratory's Hazardous Waste Facility Permit and P409—"Waste Management," "waste generators must evaluate their processes prior to generating waste to ensure that waste minimization opportunities have been identified and implemented."

By answering the questions listed below, the generator is identifying the extent to which waste minimization efforts have been or are being considered.

Note:

- Contact the Pollution Prevention Program for pollution prevention and waste minimization assistance at 7-4348.
- Additional guidance on waste minimization for typical waste streams and chemical alternatives is available at http://int.lanl.gov/environment/waste/http://int.lanl.gov/environment/waste/

Figure 4-5



To enter waste prevention/minimization information to a waste stream profile, perform the following tasks:

Note: This section applies to section 1 of the WPF.

1. Click on waste prevention/minimization in the navigation panel of the waste stream profile form for the waste prevention/minimization profile panel to appear. (see Figure 4-5)

   Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. From the corresponding drop down list provided, select an answer for each of the waste prevention/minimization questions.
3. If any of the selected responses require a comment, enter your text in the comment box provided.

   Note: WPF will not be refused or rejected if it includes comments but rather, comments will be used to assist generators and WMC's with waste minimization and prevention efforts.

4. Click the save button to save all data entered into the waste prevention/minimization profile panel.

4.2.1.5 Chemical/Physical Information

To enter Chemical and Physical information to a waste stream profile, perform the following tasks:

Note: This section applies to section 2 of the WPF.

1. Click on chemical and physical information in the navigation panel of the waste stream profile form for the chemical and physical information profile panel to appear. (see Figure 4-6)

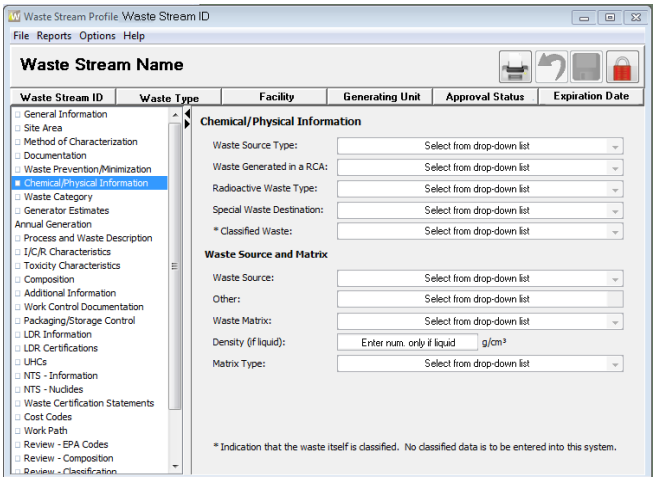
   Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. From the drop down list provided, select a waste source type for the waste stream.

   Note:

Figure 4-6

- If the waste type is unused/unspent chemicals, complete all sections, fill out a WPF when unable to use the Lab-wide profile for new/unused chemicals, describe in the process and waste description panel (See section 4.2.1.8), and Submit MSDS for each chemical to accompany CWDR.
- If the waste type is Process Waste/Spent Chemical, complete all sections.



3. From the drop down list provided, indicate whether or not the waste was generated in a RCA by selecting yes or no.
4. From the drop down list provided, select the radioactive waste type.

Note:

- If the waste generated is in a RCA and is nonradioactive, follow all the requirements of ISD 121-1, Radiation Protection, regarding Contamination Control.
- When generating Naturally Occurring Radioactive Material (NORM) waste, contact the WDP-LLWD Project for guidance.

5. If the waste is intended for a special destination, select the destination from the drop down list provided.

Note: For the following special destinations, additional information is required for acceptance and will be requested via additional waste stream profile panels:

- Sanitary Waste Water System (SWWS) Plant
- Radioactive Liquid Waste Treatment Facility (RLWTF) at TA-50
- Radioactive Liquid Waste Treatment Plant (RLWTP) at TA-53
- HE Wastewater Treatment Facility (TA-16)
- Nevada Test Site (NTS)
- Contact your WMC for assistance in determining proper disposal destinations.

6. From the drop down list provided, indicate the waste classification by selecting unclassified or classified/sensitive.

Note:

- **WARNING:** No classified/sensitive information is to be entered into the WCATS application.
- If your waste stream pertains to classified information, please contact ENV-RCRA for assistance.

- If the waste itself is considered classified/sensitive, first, it is encouraged that the user declassifies all classified/sensitive waste, then, ensure that there is a disposal path forward and select yes from the drop down list.

To enter waste source and matrix information to a waste stream profile, perform the following tasks:

7. From the drop down list provided, select a waste source for the waste stream.

Note: The waste profile designation of Waste Source A or Waste Source B is important to LANL for mandatory annual waste reporting to DOE. Under Executive Order 450.1a, DOE collects waste quantity generated from each of its sites by waste type and whether it was generated by routine processes or non-routine events.

See Table 2 below for more information on waste source options.

Table 2

Waste Source A is:

• Produced from any production operation, analytical, and/or R&D Laboratory operations; treatment, storage, disposal operations, "work for others;" or any other periodic and recurring work that is considered ongoing in nature.

• Generated at the Laboratory from regular activities, a waste stream of a predictable quantity and characterization, and is not part of Environmental Restoration activities.

Source	Description
Decon (decontamination)	Results from routine removal of unwanted material (especially radioactive material) from the surface of, or from within another material
Materials Processing Production	Generated from mission-oriented materials processing and/or production
Research/Development/Testing	Generated from mission-oriented research, development, and/or testing
Scheduled Maintenance	Generated from planned/routine maintenance activities
Housekeeping Routine	Generated from routine/ongoing housekeeping activities
Spill cleanup Routine	Generated from conventional wiping/mopping/cleaning of normal, day-to-day spills resulting from routine activities
Sampling Routine Monitoring	Generated from routine, ongoing sampling/monitoring actions necessary as a part of mission-oriented project activity
Other	If the routine waste does not fit one of the above categories, check "other" and describe

Waste Source B is:

- Generated or occurs on an unscheduled basis, or is of unpredictable quantity and/or characterization.
- Because of unpredictability, cannot be trended over extended period of time.

Source	Description
Abatement	Removal of material such as asbestos or contaminated items that are not a routinely generated waste
Construction/Upgrades	Debris or waste from construction or remodeling, including removal of equipment or building components
Demolition	Generated from tearing down/removal of a building, or portion thereof
Decon/Decom (D&D)	Decontamination (Decon): removal of unwanted material (especially radioactive material) from the surface of, or from within another material and Decommissioning (Decom): permanent removal from service of surface facilities and components necessary for pre-closure activities only; after facility closure, in accordance with regulatory requirements and environmental policies
Investigation-Derived	Investigation-Derived Waste (IDW) is debris or waste from collecting environmental samples at a solid waste management unit and/or other areas of concern (e.g., soil contaminated with a listed waste or that exhibits characteristics of contamination, personal protective equipment, or sampling equipment). **Note***:* Remediation/Restoration waste is not considered IDW.
Orphan/Legacy	Any material or waste with an unknown origin, history, generator, constituent, or process or any material or waste that does not have a defined owner
Remediation/Restoration	Debris or waste from Environmental Restoration activities, or other activities conducted under a RCRA corrective action
Repackaging (secondary)	Generated from the required over-packing (repacking) of leaking or damaged waste containers
Unscheduled Maintenance	Generated from emergency, unplanned, non-routine maintenance activities

Housekeeping— Non-routine	Generated from lab, building, storage area, or outdoor area cleanup (housekeeping) activities. Includes clean-outs of excess or unwanted items and materials, and chemical inventory reduction projects
Spill cleanup-Non-routine	Generated from cleanup of accidental releases or spills
Non-petroleum Tanks	Generated from removal and/or cleanup of storage tanks containing material other than petroleum products
Petroleum Tanks	Generated from the removal and/or cleanup of storage tanks containing petroleum products
Other Waste	If the waste does not fit into one of the above categories, check other and describe in the Waste/Process Description at the top of Page 2.

8. From the drop down list provided, select a waste matrix for the waste stream profile.

Note: See Table 3 below for more information on waste matrix options.

Table 3

Category	Description
Gas	• *Gas at a pressure less than or equal to 1.5 atmospheres* • *Gas at a pressure greater than 1.5 atmospheres* • *Gas: liquefied, compressed. A gas, which in a packaging under the charged pressure, is partially liquid at a temperature of 20° C (68° F).*
Liquid	• *Aqueous waste* — waste that is amenable to pH measurement; an aqueous solution contains at least 20% free water by volume. • *Non-aqueous waste* — liquid (or liquids) that contains less than 20% water • *Suspended solids/aqueous* — an aqueous liquid with a suspension of finely divided particles from which the particles do not settle out readily and that cannot be readily filtered (a colloid) • *Suspended solids/non-aqueous* — a non-aqueous liquid with a suspension of finely divided particles from which the particles do not settle out readily and that cannot be readily filtered (a colloid)
Solid	• *Powder, ash, or dust* — a loose grouping or aggregation of solid particles • *Solid* — a substance that has a definite volume and shape and that resists forces that tend to alter its volume or shape • *Sludge* — any thick, viscous mass; usually a sediment or filtered waste product • *Absorbed/adsorbed liquid* — a liquid substance that has penetrated into a solid

• *Debris* — defined in P409 Construction and Demolition debris tool

Note*:* Profile different waste streams separately (e.g., liquid acetone and Kim wipes contaminated with acetone are both from the same process but are separate waste streams to be profiled separately).

9. From the drop down lists provided, select a single matrix type for the open waste stream profile.

Note:

- *Homogeneous* waste contains only *one* material or substance or waste has its components adequately mixed so that identical samples can be drawn throughout.
- *Heterogeneous* waste contains multiple components that are separate because of density or specific gravity and are located in different places within the mixture.
- If waste is heterogeneous, provide a description in the process and waste description panel. (see section 4.2.1.9)

10. Click the save button to save all data entered into the profile.

4.2.1.6 Waste Category

To select a waste category for a waste stream profile, perform the following tasks:

Note: This section applies to section 2 of the WPF.

1. Click on waste category in the navigation panel of the waste stream profile form for the waste category profile panel to appear. (see Figure 4-7)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. From the available waste categories table provided, select all proper waste categories that apply to the waste stream by clicking on the respective check box.

Note: See Table 4 below for waste available categories and descriptions.

Figure 4-7

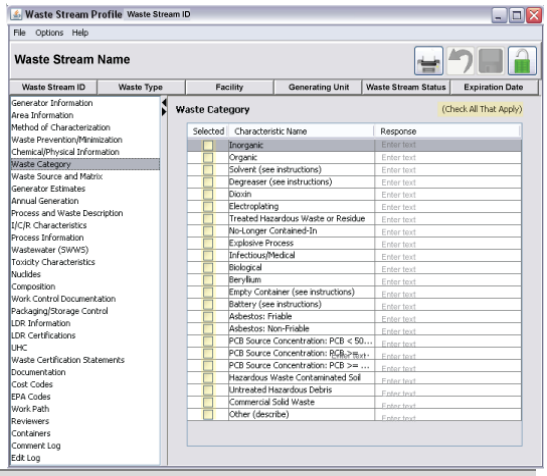


Table 4

Category	Description
Inorganic	Pertaining to, or composed of, chemical compounds that do not contain carbon as the principal element (except carbonates and cyanides).

Organic	Composed of chemical compounds based on carbon chains/rings and containing hydrogen with/without oxygen, nitrogen, or other elements.
Solvent	Substances that dissolve or mobilize other constituents (examples: degreasing, cleaning, fabric scouring, diluents, extraction, reaction, and synthesis media). Still bottoms from the recovery or recycling of listed spent solvents are also listed spent solvents. Generally, for waste-characterization purposes, a volatile or semi-volatile organic compound specified for its toxic or ignitable characteristics. **Note**: This box is checked if the solvent meets the listing under 40 CFR 261.31; either F002, F003, F004, or F005. These solvents have certain definition criteria and those criteria are detailed in the following. For solvent(s) (i.e., the listing for F002, F004, or F005), or solvent mixtures (i.e., the listing for F001, F002, F004, and/or F005), with the concentration of 10% or greater, by volume, before use and/or any F003 constituent(s). List each constituent and its concentration in Section 5. (See ENV-RCRA, "Generator Support Guidance Information," for the solvent listing.)
Degreaser	A liquid used to clean or dissolve organic contamination from an object. Often volatile organic solvents or commercial cleaning products for mechanical or electrical components. **Note**: This box is checked if the degreaser meets the listing under 40 CFR 261.31 for F001. These degreasers have certain definition criteria and those criteria are detailed in the following. For degreaser(s) (i.e., the listing for F001), or solvent mixtures (i.e., the listing for F001, F002, F004, and/or F005) with the concentration of 10% or greater, by volume, before use or F001 (10% before use) and F003 constituents. List each constituent and its concentration in Section 3. (See ENV-RCRA, "Generator Support Guidance Information," for the solvent listing.)
Dioxin	A member of a family of highly toxic chlorinated aromatic hydrocarbons found in a number of chemical mixtures. Dioxin is also known as polychlorinated dibenzo-para-dioxin.
Electroplating	A material processing operation to cover or coat an object with a thin layer of metal by electrolysis. The process can generate corrosive and toxic metal-containing wastewater, treatment sludges and rinsates. Regulated electroplating operations do not include the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; (6) chemical etching and milling of aluminum; (7) chemical conversion coating (wastewater); (8) electrolyses plating; and (9) printed circuit board manufacturing (unless etching or milling). Describe in the "Waste/Process Description" box the detail of the electroplating process. **Note**: Treatment of wastewater may result in the classification of an F006 RCRA-regulated sludge after-treatment. **Note**: Treatment of wastewater from the chemical conversion coating of aluminum may result in the classification of an F019-RCRA-regulated waste sludge. **Note**: The electroplating meets the listing under 40 CFR 261.31 for F007, F008, or F009.
Treated Hazardous Waste	Waste or residue generated from the treatment of listed or characteristic hazardous waste. This treatment includes waste from generator treatment under 40 CFR 262 and waste from

or Residue	RCRA-permitted or interim-status facilities under 40 CFR 264 or 265. Also included are wastes from treated hazardous debris under 40 CFR 261.3(f)(1). For treated hazardous debris, describe the following in the process description [40 CFR 261.3(f)(1)]: • How the hazardous debris was originally generated, and • The technology from 40 CFR 268.45, Table 1, used to treat the debris. **Note**: (See P409, "Nonradioactive Waste Tool," and click on "Treated Formerly Characteristic Waste.") 1) If checked, provide WPF numbers in the Waste/Process Description field or in Section 3, "Additional Information" for all wastes prior to treatment. EPA codes and UHCs associated with these WPFs are needed to certify the treatment for the waste(s). 2) See additional instructions under the Notification and Certification—"TSDF or Generator Treatment" subsection on Attachment 4, the LDR form. The LDR form will need to be completed to inform the receiving treatment storage disposal facility (TSDF) that the waste either does or does not meet the treatment standards and that a certification will be required.
No-Longer Contained-In	This applies only to hazardous debris and/or hazardous environmental media for which the generator has received a no-longer contained-in determination from the State. The following is needed to meet the requirement under 40 CFR 261.3(f)(2) and 268.7(d) for hazardous debris and 40 CFR 268.7(e) for hazardous waste contaminated soil. The documentation of the no-longer contained-in determination will need to be provided with the WPF.
Explosive Process	High Explosive (HE) or HE-contaminated waste. Treated explosive waste does not fall under this category but falls under the "Treated Hazardous Waste or Residue" category.
Infectious / Medical	Waste materials that carry a probable risk of transmitting disease to humans or animals. Examples include, but are not limited to: • Regulated medical waste • Infectious substances (etiologic agents) • Other potentially infectious materials (OPIM) See LANL Waste Acceptance Criteria, Attachment 10.
Biological	A waste that cannot be classified as an infectious substance or as a regulated medical waste and is not subject to federal or state regulations of infectious waste.
Beryllium	Includes beryllium metal, beryllium oxide, alloys containing 0.1% or more beryllium, and beryllium compounds, such as beryllium sulfate. See ISD101-21, Chronic Beryllium Disease Prevention Program for more information.

Empty Container	Check if the item meets the definition of a "RCRA empty container."
Battery	Alkaline and carbon batteries may be discarded as municipal refuse. • Hazardous-waste batteries (e.g., mercury, lithium, and nickel-cadmium) are to be managed as universal waste. (See Lab-wide profile). **Note**: See either P409, the "Waste Identification Toolset," and click on the appropriate button in the battery section or the Battery Recycling Program for guidance. Other non-hazardous batteries will need to be profiled. **Note**: Non-radioactive, wet-lead, acid and gel cell batteries should be recycled through salvage or as universal waste.
Asbestos	Contains any of the following naturally occurring crystalline minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, and anthrophyllite. Comes in two forms: • Friable: brittle or readily crumbled, pulverized, or reduced to powder by hand pressure when dry. • Non-friable: not brittle or readily crumbled when dry and is completely encapsulated in a manufactured article such as an undamaged safe or file cabinet. **Note**: Refractory ceramic fiber does not meet the definition of asbestos and is not a New Mexico Special Waste. Check with your WMCs for safe handling.
Polychlorinated Biphenyls	Regulated by the source concentration of Polychlorinated Biphenyls (PCBs) in the material. Check the box that indicates your source concentration.
Hazardous Waste Contaminated Soil	Soil that contains a hazardous waste listed in subpart D of part 261, or that exhibits a characteristic of hazardous waste identified in subpart C of part 261. "Soil" means unconsolidated earth material composing the superficial geologic strata (material overlying bedrock). Soil consists of clay, silt, sand, or gravel size particles as classified by the U.S. Natural Resources Conservation Service or a mixture of such materials with liquids, sludges or solids which is inseparable by simple mechanical removal processes and which is made up primarily of soil by volume based on visual inspection. Any deliberate mixing of prohibited hazardous waste with soil that changes its treatment classification (i.e., from waste to contaminated soil) is not allowed under the dilution prohibition in §268.3 [40 CFR 268.2(k)]. Hazardous waste contaminated soil is the only environmental media that has specific certification requirements under the LDR regulations, 40 CFR 268. See additional instructions for completing the LDR for hazardous waste contaminated soil that meets or does not meet treatment standards under the Notification and Certification: "Generator Requirements" subsection. For non-hazardous soil (environmental media) do not mark this box.
Untreated Hazardous Debris	Debris that contains a hazardous waste listed in Subpart D of part 261, or that exhibits a characteristic of hazardous waste identified in subpart C of part 261 (e.g., PPE). Any deliberate mixing of prohibited hazardous waste with debris that changes its treatment classification (i.e., from waste to hazardous debris) is not allowed under the dilution prohibitions in §268.3

	[40 CFR 268.2(h)]. See additional instructions for completing the LDR for untreated hazardous debris under the "Notification and Certification — Generator Requirements" subsection. For non-hazardous debris (e.g., construction debris, concrete, dirt, and/or rebar) do not mark this box for untreated hazardous debris under this section.
Commercial Solid Wastes	Solid waste does not include wastes that are hazardous, mixed, TSCA, NM Special, wastes in a liquid form, or concrete or asphalt wastes destined for use, reuse, or recycling, or any waste destined for an industrial-waste landfill. Check this box for profiling a waste to be accepted at the Los Alamos County Landfill other than routine sanitary solid waste such as office trash, loads with a waste ticket obtained from MRF (for government-plated vehicles), or waste with approved acceptable knowledge documentation and signed certification for concrete, asphalt, or soil (for off-site release, not for disposal). **Note** For wastes that are regulated as Solid Waste, follow P409, "Waste Management," requirements. Contact Water Quality and RCRA (ENV-RCRA) for assistance with waste destined for the sanitary solid-waste landfill.
Other	If the waste does not belong in one of the above waste categories, check "other" and describe your waste in detail under Waste Description at the top of Page 2.

3. If desired, a response to the selected category can be entered by double-clicking in the corresponding response field and entering the relevant information.
4. Click the save button to save all data entered into the waste category profile panel.

4.2.1.7 Generator Estimates

Generators are expected to provide a general estimate of the waste stream's annual volume per calendar year. For the profile to be approved, estimates for three years must be entered. Estimates can be added for future years, and previously-entered estimates can be inactivated and updated.

In accordance with the Laboratory Director's instructions, generators must budget for waste generation activities. This information will assist groups such as, WDP or ENV-ES, in projecting waste volumes for each year, as WPFs are reviewed, and extended if necessary, on an annual basis.

To enter generator estimates for a waste stream profile, perform the following tasks:

Note: This section applies to section 2 of the WPF.

1. Click on generator estimates in the navigation panel of the waste stream profile form for the generator estimates profile panel to appear. (see Figure 4-8)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

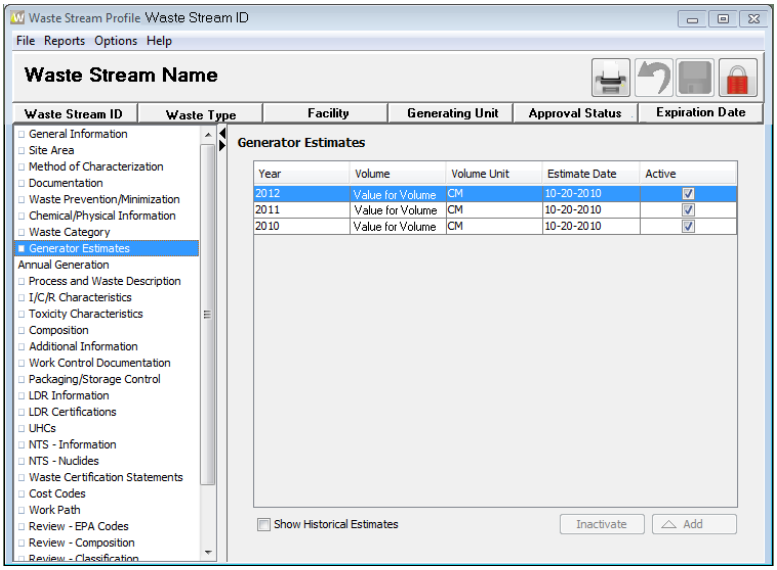
2. In the generator estimates profile panel, click the add button.

3. In the Input dialog box that appears, enter the year of the estimate and click ok.

Note: If there is currently an estimate for the year you have entered, you will be prompted with an option to inactivate the current estimate. You must inactivate the current estimate to create a new one for the same year.

4. In the new row that appears in the generator estimates table, double click in the volume column for the waste stream.

Figure 4-8



Note: The volume unit is automatically set to cubic meters (cm). If you would like to change the unit of measure, click in the volume unit column to choose from a drop down list of options.

5. The Estimate Date is calculated by the application.
6. Repeat steps 2-4 for two more years (three total years are required).
7. Click the save button to save all data entered into the generator estimates profile panel.

Note:

- A user can also inactivate an estimate by selecting the desired estimate and clicking the inactivate button below the table. A new estimate for that year can then be entered.
- To view all inactive and active estimates for the open waste stream, check the Show Historical Estimates box in the lower left corner of the generator estimates profile panel.

4.2.1.8 Annual Generation

The application keeps track of the amount of waste generated on a given waste stream for the year to date. To review the annual generation table for an open waste stream profile, perform the following tasks:

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

1. Click annual generation in the navigation panel of the waste stream profile form to display the annual generation profile panel.

Note:

- Notice the annual generation table is organized by year, number of containers assigned to the waste stream, total volume and weight of all the included containers, and the total weight of the waste alone, minus the containers.

- Notice the option to view alternative units of measurement for both the volume and weight are offered in dropdown list provided in the lower left corner of the annual generation profile panel.

4.2.1.9 Process and Waste Description

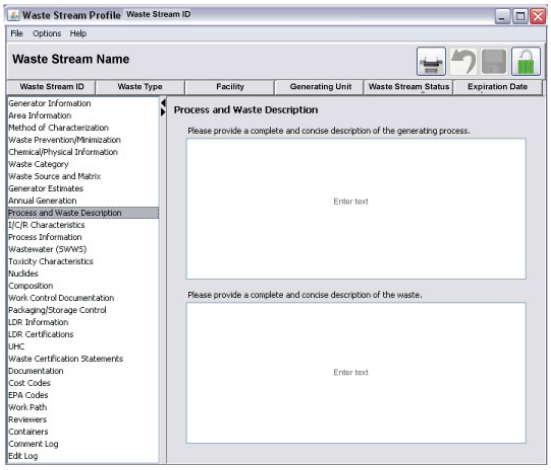
Generators are required to provide any additional information pertaining to chemical, physical, or radiological characteristics of the waste that could pose a threat to human health and the environment.

To enter Process and Waste Description information to a waste stream profile, perform the following tasks:

Note: This section applies to section 3 of the WPF.

1. Click on process and waste description in the navigation panel of the waste stream profile form for the process and waste description profile panel. (see Figure 4-9)

Figure 4-9



Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. In the fields provided, enter a complete and concise description for both the waste generating process and the waste associated with the waste stream.

Note: Do not include the number of containers, the volume and weight of waste, or property numbers; these are specific to a waste load, not a waste stream.

3. Click the save button to save all data entered into the process and waste description profile panel.

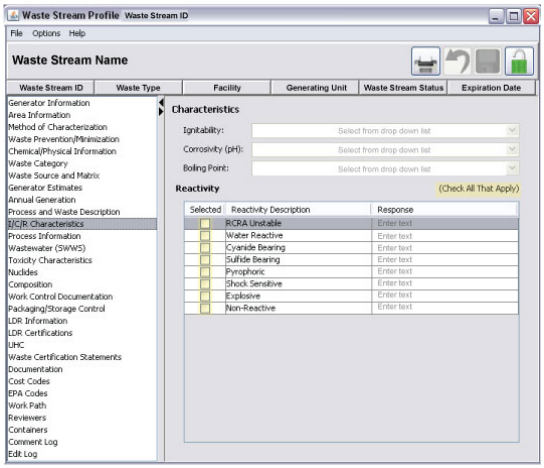
4.2.1.10 I/C/R Characteristics

I/C/R characteristics refer to the ignitability, corrosivity, and reactivity of a waste stream. To identify I/C/R characteristics for a waste stream profile, perform the following tasks:

Note: This section applies to section 4 of the WPF.

1. Click on I/C/R characteristics in the navigation panel of the waste stream profile form for the I/C/R characteristics profile panel. (see Figure 4-10)

Figure 4-10



Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. In the drop down list provided, select an ignitability characteristic.

Note: EPA ignitability is defined in 40 CFR 261.22(a). A solid was exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties described in the first four categories shown in Table 5 below:

Table 5

Category	Description
Flash Point Temperature Ranges	40 CFR 261.21(a)(1): It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume and has flash point less than 60° C (140° F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79 or D-93-80 (incorporated by reference, see 40 CFR 260.11), or a Setaflash Closed Cup Tester, using the test methods specified in ASTM Standard D-3278-78 (incorporated by reference, see 40 CFR 260.11), or as determined by an equivalent method approved by the Administrator under procedures set forth in 40 CFR 260.20 and 260.21. Select the temperature range between which a material flashes as measured by the Pensky-Martens Closed Cup tester method or equivalent.
EPA Ignitable — Non-liquid	40 CFR 261.21(a)(2): It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.
DOT Flammable Gas	40 CFR 261.21(a)(3): It is an ignitable compressed gas as defined in 49 CFR 173.300 and as determined by the test methods described in that regulation or equivalent test methods approved by the Administrator under 40 CFR 260.20 and 260.21. The Department of Transportation (DOT) regulations define flammable gas in 49 CFR 173.115(a): Division 2.1 (Flammable gas). For the purpose of the subchapter, a "flammable gas" means any material which is a gas at 20° C (68° F) or less at 101.3 kPa (14.7 psi) of pressure (a material which has a boiling point of 20° C (68° F) or less and 101.3 kPa (14.7 psi)) which: (1) Is ignitable at 101.3 kPa (14.7 psi) when in a mixture of 13 percent or less by volume with air; or (2) Has a flammable range at 101.3 kPa (14.7 psi) with air of at least 12 percent regardless of the lower limit. Except for aerosols, the limits specified in paragraphs of this section shall be determined at 101.3 kPa (14.7 psi) and a temperature of 20°C (68°F) in accordance with ASTM E681-85, Standard Test Methods for Concentration Limits of Flammability of Chemicals or other equivalent method approved by the Associate Administrator for Hazardous Materials Safety. The flammability of aerosols is determined by the tests specified in 40 CFR 173.306(i) of this part.
DOT Oxidizer	40 CFR 261.21(a)(4) It is an oxidizer as defined in 49 CFR 173.151. DOT Oxidizer is actually defined in 49 CFR 173.127(a). For the purpose of this subchapter, "oxidizer" (Division 5.1) means a material that may, generally by yielding oxygen, cause or enhance the combustion of other materials. A solid material is classified a Division 5.1 material if the mean burning time of the test mixture, is equal to or less than that of the average of the three tests with ammonium persulfate mixture. A liquid is classed as a Division 5.1 material by analogy to existing entries in the 49 CFR 172.101 Table. This applies to both primary and secondary hazard classification by 49 CFR. Solutions are

	evaluated on case-by-case basis; may or may not have the oxidizer properties
Not Ignitable	Check this only if the waste does not meet any of the above criteria.

Note: If the waste is ignitable by one of these criteria, identify the component(s) causing this condition in the composition profile panel. (See section 4.2.1.12)

3. In the drop down list provided, select a corrosivity characteristic.

Note: EPA corrosivity is defined in 40 CFR 261.22(a). A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties shown in Table 6 below:

Table 6

Category	Description
pH Ranges	40 CFR 261.22(a)(1) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using Method 9040 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in 40 CFR 260.11 of this chapter. Liquids that do not contain water (hydrogen ions) cannot be measured for pH.
Liquid Corrosive to Steel	40 CFR 261.22(a)(2) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 millimeters (0.250 inch) per year at a test temperature of 55° C (130° F) as determined by the test method specified in NACE (National Association of Corrosion Engineers) Standard TM-01-69 as standardized in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." EPA Publication SW-846, as incorporated by reference in 40 CFR 260.11 of this chapter.
Non-aqueous	Check this if the waste does not meet any of the above criteria.

Note: If the waste is corrosive by one of these criteria, identify the component(s) causing this condition in the composition profile panel. (See section 4.2.1.12)

4. If applicable, in the drop down list provided, select the temperature range that best describes the boiling point of your liquid waste.

Note:

- Boiling point is the temperature at which the transition from the liquid-to-gaseous phase occurs at atmospheric pressure.
- The boiling point identifies the DOT packing group for Hazard Class 3.
- If the waste is not of liquid form, select the not applicable option.

5. In the table of options provided, select reactivity characteristics by checking the selected box in the corresponding row.

Note: EPA reactivity is defined in 40 CFR 261.23(a) A solid waste item exhibits the characteristic of reactivity if a representative sample of the waste fits any of the following category descriptions shown in

Table 7 below:

Table 7

Category	Description
RCRA Unstable	40 CFR 261.23(a)(1) It is normally unstable and readily undergoes violent changes without detonating.
Water Reactive	40 CFR 261.23(a)(2) It reacts violently with water. OR 40 CFR 261.23(a)(3) It forms potentially explosive mixtures with water. OR 40 CFR 261.23(a)(4) When mixed with water, it generates toxic gases, vapors, or fumes in sufficient quantity to present a danger to human health or the environment.
Cyanide Bearing	40 CFR 261.23(a)(5) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.
Sulfide Bearing	40 CFR 261.23(a)(5) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.
Pyrophoric	Under normal conditions may cause fire through friction or retained heat from manufacturing or processing, or can be ignited readily and when ignited burns so vigorously and persistently as to create a serious transportation, handling, or disposal hazard. 40 CFR 261.23(a)(1) It is normally unstable and readily undergoes violent changes without detonating. 40 CFR 261.23(a)(6) It is readily capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement. 40 CFR 261.23(a)(7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.
Shock Sensitive	40 CFR 261.23(a)(7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.
Explosive	40 CFR 261.23(a)(8) It is a forbidden explosive as defined in 49 CFR 173.51, or Class A explosive as defined in 49 CFR 173.53, or a Class B explosive as defined in 49 CFR 173.88. DOT Forbidden explosives are defined in 49 CFR 173.54. Former DOT Class A and B explosives have been reclassified to the following Divisions: [49 CFR

	173.53] Current Division Classification Former Class Division 1.1 Class A Division 1.2 Class A & B Division 1.3 Class B 49 CFR 173.52 provides classification codes and compatibility of explosives.
Non-reactive	Check this if the waste does not meet any of the above criteria.

Note: If the waste is reactive by one of these criteria, identify the component(s) causing this condition in the composition profile panel. (See section 4.2.1.12)

6. If desired, enter a response to the reactivity characteristic selected by double clicking in the response column of the corresponding row.
7. Click the save button to save all data entered into the I/C/R characteristics profile panel.

4.2.1.11 Toxicity Characteristics

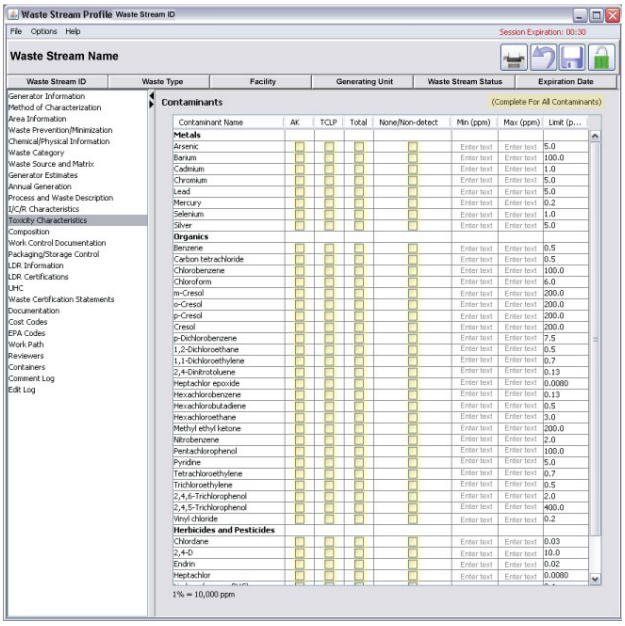
Note: Toxicity characteristics refer to characterizing the following contaminants:

- Eight metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) and
- Twenty-four toxicity characteristic organics (VOCs/SVOCs)
- Eight herbicides and pesticides

A solid waste that exhibits the characteristic of toxicity has an EPA Hazardous Waste Number as defined in 40 CFR 261.24. To identify Toxicity characteristics for a waste stream profile, perform the following tasks:

Note: This section applies to section 4 of the WPF.

Figure 4-11



1. Click on Toxicity characteristics in the navigation panel of the waste stream profile form for the Toxicity characteristics profile panel. (see Figure 4-11)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. For each contaminant listed in the contaminants table provided, indicate the method of characterization.

Note:

- To ensure a complete waste stream profile, characteristics for all contaminants must be accounted for.
- Methods of characterization are described in the table below. (See
- Table 8)

Table 8

Method	Description
AK	If acceptable knowledge (AK) documentation was used as the characterization method, check the "AK" box. **Note:** The WPF by itself is not adequate documentation for AK. Acceptable knowledge documentation is described in P409.
toxicity characteristic leaching procedure (TCLP)	Analysis was performed either for the entire waste or only for certain constituents.
Total	Analysis was performed either for the entire waste or only for certain constituents. **Note:** If the waste was analyzed by "Total" and is in solid form, do not divide by 20; enter the total results as-is.

3. For each contaminant, indicate the concentration by entering the minimum-to-maximum range in parts per million by double clicking in the minimum and maximum fields provided in each corresponding row.

Note:

- If no concentration is detected, check the None/Non-detect box in the corresponding column.
- Notice the limit column identifies the regulatory limit for each contaminant.

4. Click the save button to save all data entered into the toxicity characteristics profile panel.

4.2.1.12 Composition

All other constituents in the waste can be listed in the composition panel of the waste stream profile. This includes any hazardous constituents not already described (see P409, "Nonradioactive Waste toolset", click on radio button for "Hazardous Waste not otherwise listed") and all other constituents, including inert constituents (water, paper, wood, metal, plastic, etc.). These listings should include "job

waste" that will be included in the waste matrix, such as gloves, plastic wrap, absorbents, blotter paper, PPE, or other items that are reasonably expected to be included in the waste matrix as a result of the generating process.

Note: This section applies to section 5 of the WPF.

To add additional constituents and contaminants to a waste stream profile, perform the following tasks:

1. Click on composition in the navigation panel of the waste stream profile form for the additional constituents and contaminants profile panel. (see Figure 4-12)

   Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. Click the *'Add (CAS)'* button to deploy the chemical reference table. (see Figure 4-13)
3. In the chemical reference table, select the desired material, by name or by Chemical Abstract Service (CAS) number and click ok. You can use the Search box to search for a partial CAS Number or Material Name.

   Note: If the material you desire is not available in the chemical reference table, proceed to step 4. If the material was available, skip to step 7.

4. If the material you desire is not available in the chemical reference table, click cancel to return to the additional constituents and contaminants profile panel. In the additional constituents and contaminants profile panel, click the other button to deploy a WCATS Input Request Dialog box.
5. Enter the name of the material you wish to add and click ok.
6. Once the newly added material is entered into the additional constituents and contaminants table, the concentration amounts can be entered by double clicking in the corresponding columns.

   Note:

   - The concentration unit is automatically set to weight percentage.

Figure 4-12

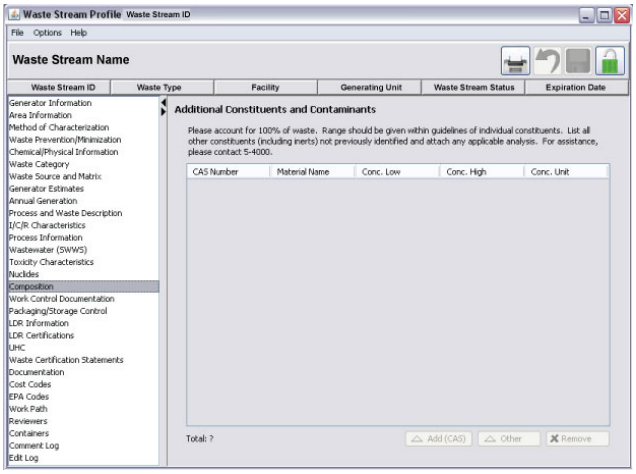
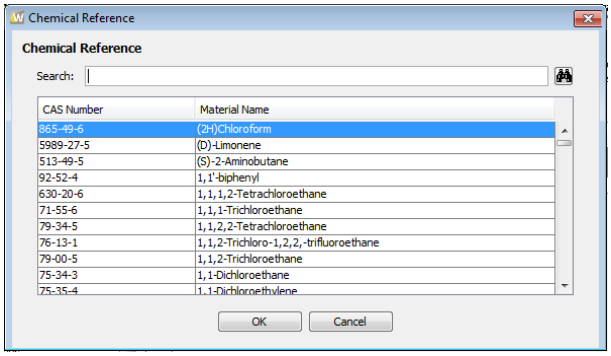


Figure 4-13



- If you wish to change the concentration unit to ppm, click in the corresponding column and select from the provided drop down list.
- Guidelines for concentration ranges are shown in the table below. (See Table 9)

Table 9

Guidelines for the ranges are:	
Constituent between	**Guideline**
0.1 and 5.0% of total	Report to the nearest 1%
5.0 and 25.0% of total	Report to the nearest 2.5%
25.0 and 50.0% of total	Report to the nearest 5%
50.0 and 100.0% of total	Report to the nearest 10%

Note: Accounting for 100% of the waste ensures proper classification, storage, transportation and disposal, but due to the errors inherent in chemical analysis and physical measurements, your maximum value may exceed 100%. Good characterization practices–including keeping to the range limits specified above–should result in a maximum value no greater than 130%, which is acceptable.

7. Click the save button to save all data entered into the additional constituents and contaminants profile panel.

Note:

- If you entered the material name via the other button, there will not be a CAS number associated with the material.
- As a general principal to convert from % to ppm: take the percentage and multiply by 10,000 (e.g., 2% x 10,000 = 20,000 ppm).
- To convert from ppm to %: take the ppm and divide by 10,000 (e.g. 20,000 ÷ 10,000 = 2%).
- To delete an unwanted item from the additional constituents and contaminants table, select the item and click the remove button in the lower right corner.
- If you frequently encounter a chemical that is not in the provided list, send the chemical name and CAS # to wastehelp@lanl.gov. An SME will review the information and add it to the list if necessary.

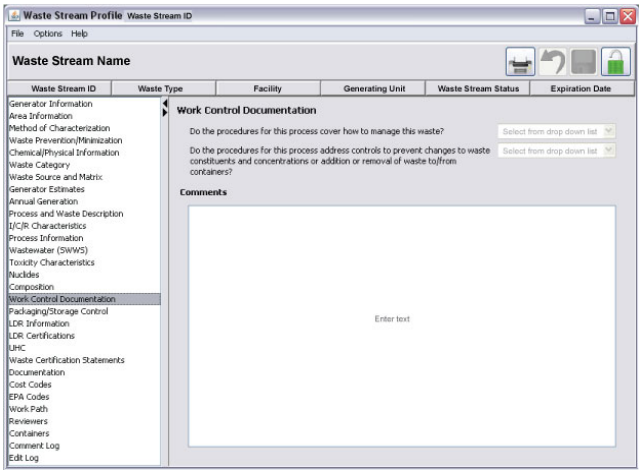
4.2.1.13 Work Control Documentation

As required in P930-2 "Waste Certification Program," waste generators must ensure that their procedures address how waste is managed and controlled. By answering the questions listed below, the

Figure 4-14

generator is confirming that the applicable procedures adequately address how waste is managed and how changes to waste constituents are prevented.

To enter work control documentation for a waste stream profile, perform the following tasks:



Note: This section applies to section 6 of the WPF.

1. Click on work control documentation in the navigation panel of the waste stream profile form for the work control documentation profile panel. (see Figure 4-14)

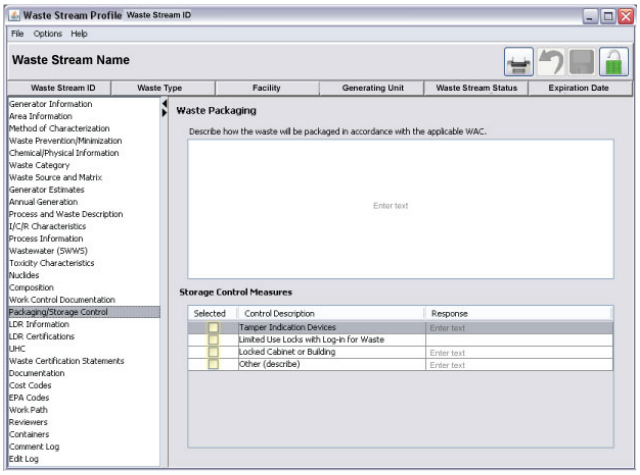
Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. From the drop down list provided, select yes or no in response to the available questions.
3. If any of the selected responses requires a comment, enter such text in the comments field provided.
4. Click the save button to save all data entered into the work control documentation profile panel.

4.2.1.14 Packaging/Storage Control Information

As required by P409, waste generators must ensure that waste is packaged in accordance with the applicable WAC. Additionally, they must identify the controls that will be implemented to prevent contents from being added to waste containers while in storage. To identify packaging/storage control information for a waste stream profile, perform the following tasks:

Figure 4-15



Note: This section applies to section 7 of the WPF.

1. Click on packaging/storage control in the navigation panel of the waste stream profile form for the packaging/storage control profile panel. (see Figure 4-15)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. In the text field provided, enter a description as to how the waste will be packaged according to the applicable WAC.
3. Identify the intended storage control measures by checking the selection box in the corresponding row.

   Note: Storage controls are considered actions taken to prevent contents from being added to waste containers while in storage.
4. If desired, a response to your selection can be entered by double clicking in the provided response field.
5. Click the save button to save all data entered into the packaging/storage control profile panel.

4.2.1.15 Waste Certification Statements

Note: Complete this section with assistance from your WMC.

To enter a waste certification statement for a waste stream profile, perform the following tasks:

Note: This section applies to section 8 of the WPF.

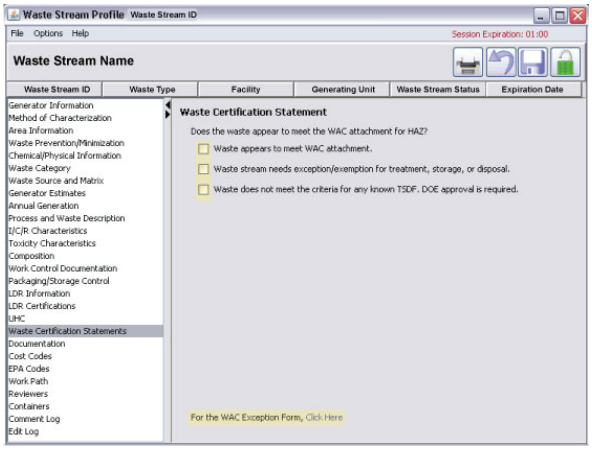
1. Click on waste certification statement in the navigation panel of the waste stream profile form for the waste certification statement profile panel. (see Figure 4-16)

   Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.
2. Certify that the waste stream meets at least one of the three available WAC attachment requirements for MTRU waste by checking the box that applies.

   Note: If the waste stream does not meet a requirement, contact WDP-LLWD.
3. Click the link at the bottom of the page to complete the WAC exception form portion.

   Note: The WAC exception form must be filled out, approved and uploaded via the documentation panel. (See section 4.2.1.22)
4. Click the save button to save all data entered into the waste certification statement profile panel.

Figure 4-16



4.2.1.16 Wastewater (SWWS)

This section is only to be completed if the Sanitary Waste Water System option was selected in the special waste destination field of the chemical/physical information panel of the waste stream profile.

Complete this section for wastewater destined for Sanitary Waste Water System (SWWS) facility at TA-46 if the wastewater is sent via pipeline, collected in a tank or in containers.

Note:

- The use of AK in lieu of analytical data for wastewater characterization must be approved by SWWS. For guidance, contact the Waste Water Systems Specialist at 667-0998, 665-7884, or 665-8507.
- Analytical methods need to conform to 40 CFR 136, unless an alternative method has been approved by ENV-RCRA.

To enter SWWS information for the waste stream profile, perform the following tasks:

Note: This section applies to attachment 1 of the WPF.

1. Click on SWWS - Characteristics in the navigation panel of the waste stream profile form for the wastewater characteristics for SWWS panel to appear. (see Figure 4-17)

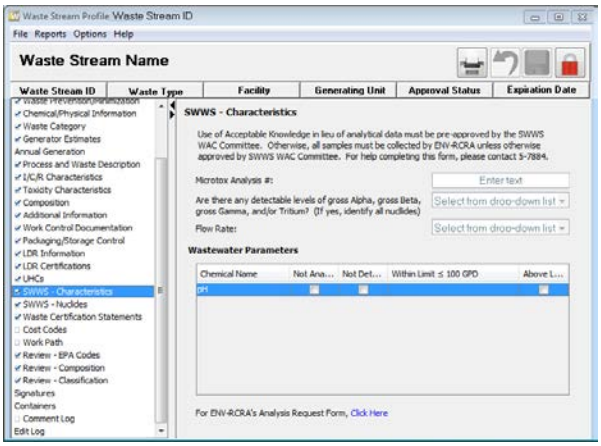
Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. If an analysis has been performed, enter a Microtox analysis number in the field provided.

Note:

- Click the link provided below the wastewater parameters table to deploy a browser to the ENV Sample Request Form, OR contact the SWWS Pre-treatment Representative at 665-7884 or 665-8507 to propose an alternate sampler.

Figure 4-17



3. From the drop down list provided, select either yes or no for detectable levels of gross Alpha, Beta, and/or Tritium.

Note: If yes, list the radionuclide and the activity level in pCi/*l*.

4. From the drop down list provided, select a flow rate for the wastewater.
5. Indicate the status of the analytical results for each wastewater parameter in the table provided by checking the correct box for either not analyzed, not detected, within limit ≤100 GPD, within limit > 100 GPD, or above limit.
6. Click the save button to save all data entered into the wastewater (SWWS) profile panel.

4.2.1.17 Wastewater (RLWTF)

This section is only to be completed if the Radioactive Liquid Waste Treatment Facility (RLWTF) option was selected in the special waste destination field of the chemical/physical information panel of the waste stream profile.

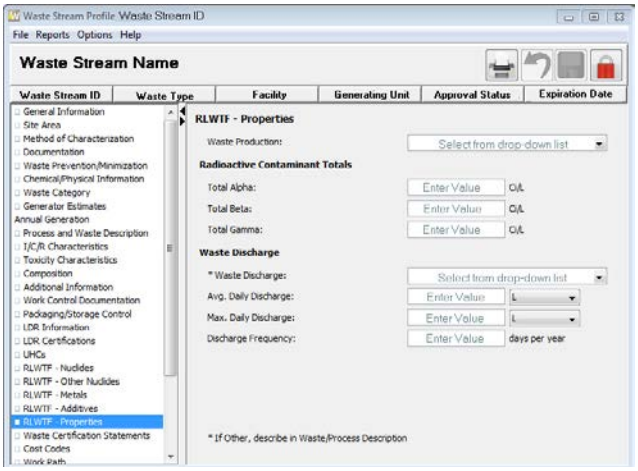
Note: If you need assistance in completing this section, contact RLW (TA50) at 7-4301.

To enter RLWTF information for the waste stream profile, perform the following tasks:

Note: This section applies to attachment 2 of the WPF.

1. Click on RLWTF - Properties in the navigation panel of the waste stream profile form for the wastewater characteristics for RLWTF panel to appear. (See Figure 4-18)

Figure 4-18



Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. From the drop down list provided, indicate the method in which the waste was produced by selecting accelerator produced, reactor produced, or other.

Note: If the other was selected, give more information in the process and waste description panel. (See section 4.2.1.9)

3. In the fields provided, enter the radioactive contaminant totals in Ci/L for alpha, beta, and gamma.
4. From the drop down list provided, select a waste discharge line.

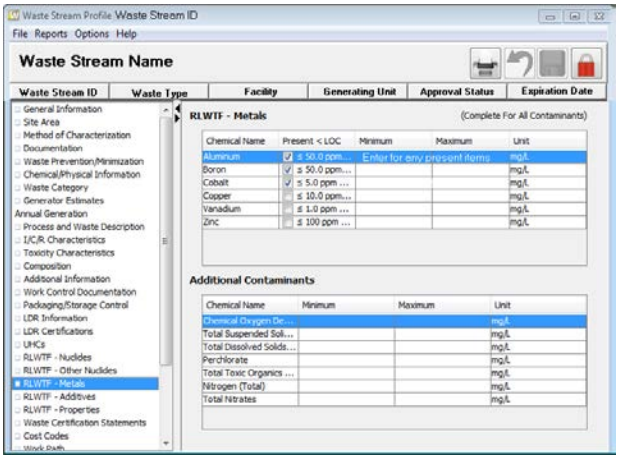
Note: If the wastewater is generated at TA-55, check the appropriate box for the discharge line to be used to transfer the water. The pH of waste discharged to the RLWTF via the "caustic line" must have a pH greater than 8.0.

5. In the fields provided, enter an average daily discharge volume amount and a maximum daily discharge volume amount.

Note: Include the waste volume plus the rinse water volume.

6. From the drop down lists provided, select a unit of measure for the discharge volume amounts.
7. In the field provided, enter the discharge frequency, or estimated number of days per year that discharge will occur.
8. Click the save button to save all data entered into this portion of the wastewater (RLWTF) profile panel.

Figure 4-19



9. Select the RLWTF – Metals panel (see Figure 4-19). Check the boxes provided for any of the six metals that are present below the level of concern (LOC).

10. In the fields provided, enter the minimum and maximum range for the metals present above LOC.
11. From the drop down list provided in the unit column of each row, select a proper unit of measure for the minimum and maximum amounts entered.
12. Click the save button to save all data entered into this portion of the wastewater (RLWTF) profile panel.
13. In the RLWTF - Nuclides table (see Figure 4-20), check the boxes provided for radionuclides that are present below LOC.
14. If the radionuclide is present above LOC, enter the minimum and maximum range, in Ci/L, in the fields provided.

    Note: If none of the radionuclide is present, enter 0 in the minimum field.

15. Click the save button to save all data entered into this portion of the wastewater (RLWTF) profile panel.
16. Additional radionuclides, not found in the radionuclides table, can be added by selecting the desired available nuclide from the other nuclides table on the RLWTF – Other Nuclides panel (see Figure 4-22) and clicking the add button.

    Note: Notice, once added to the selected nuclides table, a minimum and maximum amount can be entered by double clicking in the respective column and a unit of measure can be selected by clicking in the column to reveal a drop down list.

17. In the RLWTF – Additives panel (see Figure 4-21), identify the additives that are present by checking either the present or not present box provided.
18. Enter an identifying name for the present additives by double clicking in the type/brand column of each respective row.

Figure 4-20

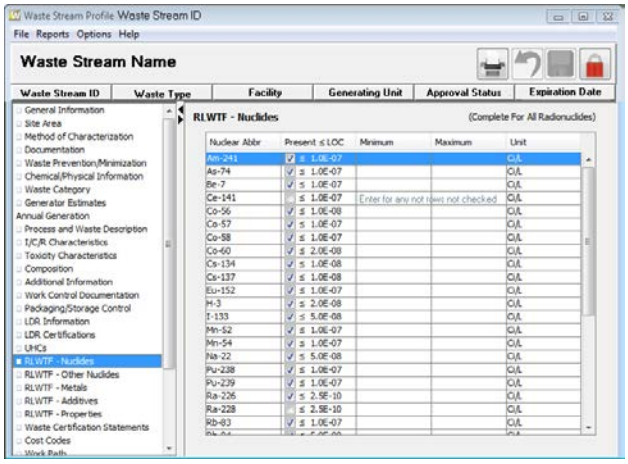


Figure 4-22

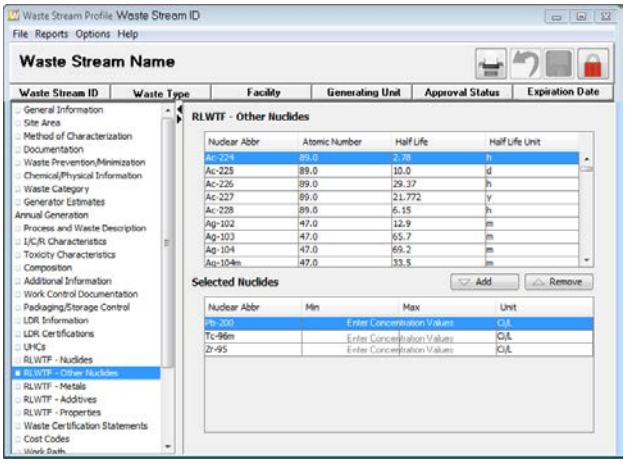
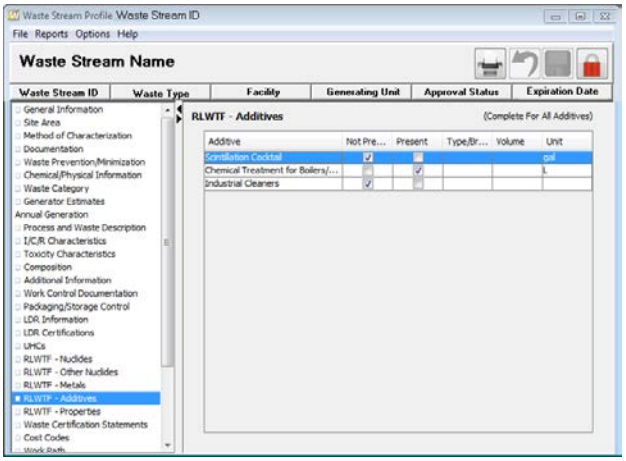


Figure 4-21



19. In the field provided, enter the volume amount for each additive present and enter a unit of measure by double clicking in the unit column of the respective row.

20. Click the save button to save all data entered into this portion of the wastewater (RLWTF) profile panel.

4.2.1.18 Wastewater (RLWTP)

This section is only to be completed if the Radioactive Liquid Waste Treatment Plant (RLWTP) option was selected in the special waste destination field of the chemical/physical information panel of the waste stream profile.

Note: If you need assistance in completing this section, contact RLW (TA-50) at 7-4301.

To enter RLWTP information for the waste stream profile, perform the following tasks:

Note: This section applies to attachment 3 of the WPF.

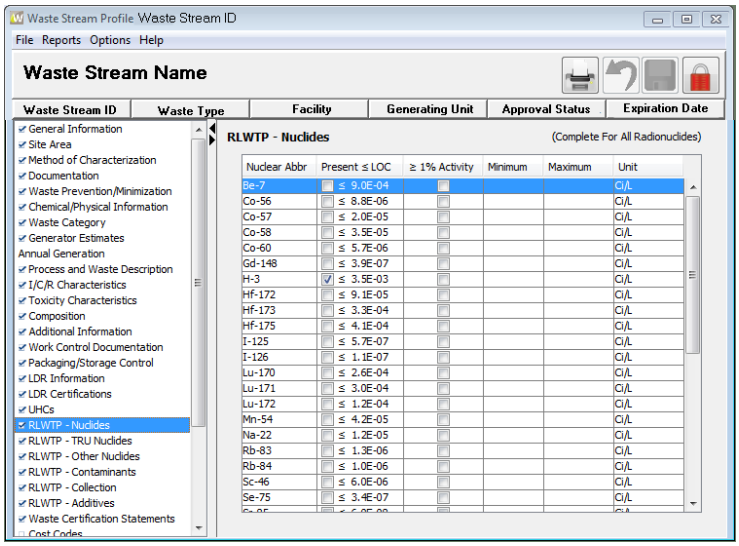
1. Click on RLWTP - Nuclides in the navigation panel of the waste stream profile form for the wastewater characteristics for RLWTP panel to appear.

   Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. In the radionuclide contaminants table (see Figure 4-23), check the boxes provided for radionuclide contaminants that are present at or below LOC.

3. If the contaminant is present at or above 1% activity, check the box provided.

Figure 4-23



4. In the fields provided, enter the minimum and maximum range, in Ci/L.

   Note: If none of the contaminant is present, enter 0 in both fields.

5. Click the save button to save all data entered into this portion of the wastewater (RLWTP) profile panel.

6. In the RLWTP – Contaminants Panel (see Figure 4-24), check the boxes provided for contaminants that are present at or below LOC.

7. In the fields provided, enter the minimum and maximum range, in mg/L.

   Note: If none of the contaminant is present, enter 0 in both fields.

8. Click the save button to save all data entered into this portion of the wastewater (RLWTP) profile panel.
9. In the RLWTP - Collection panel (see Figure 4-25), check the boxes provided for locations that radioactive discharge is present at or below activity level in Ci/L.
10. If radioactive discharge is present above the limit, check the box provided.
11. Click the save button to save all data entered into this portion of the wastewater

    (RLWTP) profile panel.
12. In the RLWTP – Additives panel (see Figure 4-26), identify whether the listed additives are present by checking either the not present or present box provided.
13. If present, enter an identifying name for the additive by double clicking in the type/brand column of each respective row.
14. In the field provided, enter the volume amount for the present additive and select a unit of measure by clicking in the unit column of the respective row.
15. In the field provided in the addition details section, enter a discharge temperature for the waste.
16. From the drop down list provided, select either Fahrenheit or Celsius as a unit of measure for the previous temperature entered.
17. In the fields provided, enter an average daily discharge volume amount and a maximum daily discharge volume amount.

    Note: Include the waste volume plus the rinse water volume.
18. From the drop down lists provided, select a unit of measure for both amounts.
19. In the field provided, enter the estimated discharge rate, or estimated number of days per year that discharge will occur.

Figure 4-24

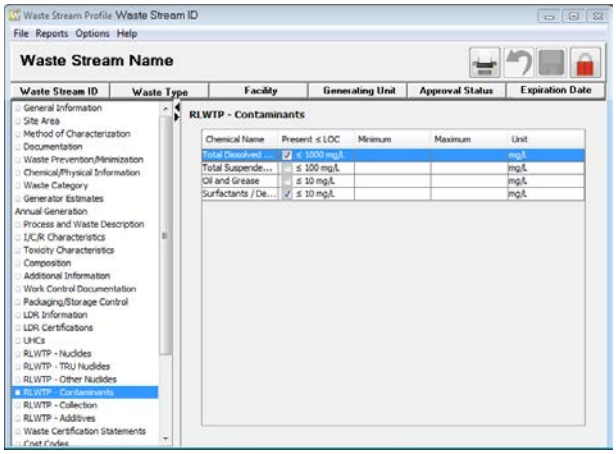


Figure 4-25

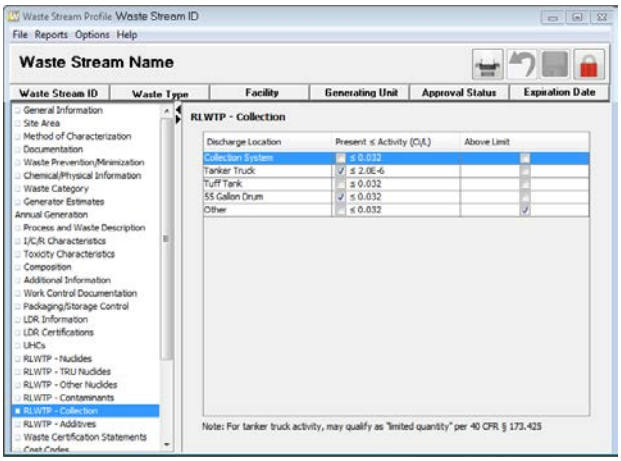
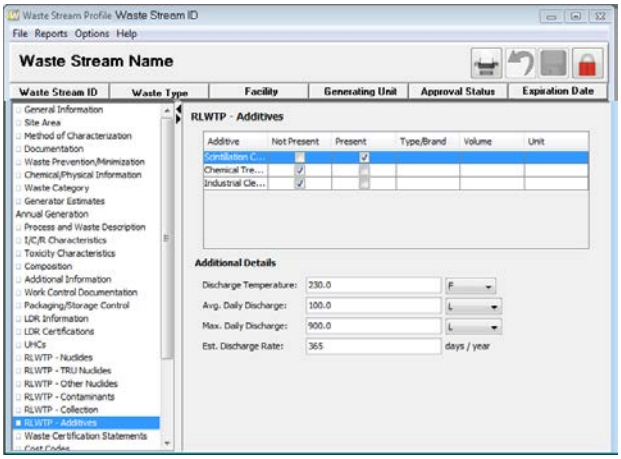


Figure 4-26



20. Click the save button to save all data entered into this portion of the wastewater (RLWTP) profile panel.
21. Additional radionuclides, not found in the radionuclides table, can be added by selecting the desired available nuclide from the RLWTP – Other Nuclides panel (see Figure 4-27) and clicking the add button.

    Note: Notice, once added to the selected nuclides table, a minimum and maximum amount can be entered by double clicking in the respective column and a unit of measure can be selected by clicking in the column to reveal a drop down list.
22. Click the save button to save all data entered into this portion of the wastewater (RLWTP) profile panel.
23. In the RLWTP – TRU Nuclides panel (see Figure 4-28), check the boxes provided for radionuclides that are present at or below LOC.
24. In the fields provided, enter the minimum and maximum range, in Ci/L.

    Note: If none of the contaminant is present, enter 0 in both fields.
25. Click the save button to save all data entered into this portion of the wastewater (RLWTP) profile panel.

Figure 4-27

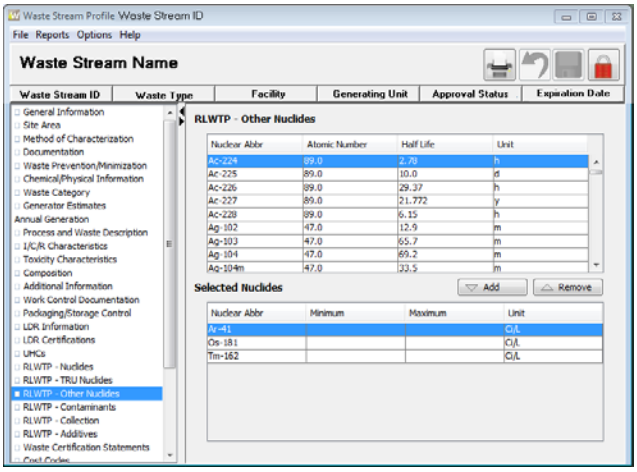
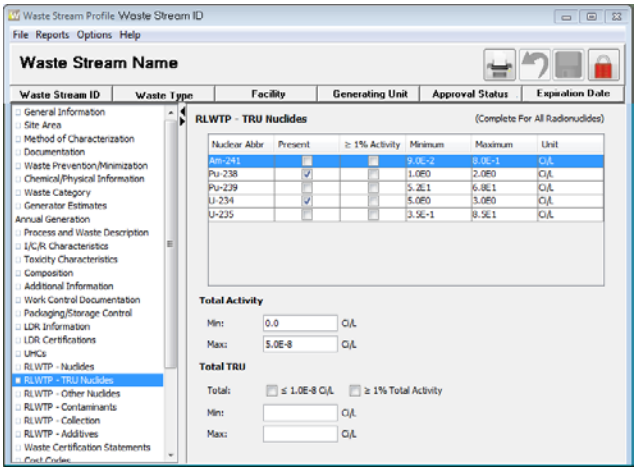


Figure 4-28



4.2.1.19 LDR Information

The composition of a waste at the point of generation determines whether it is subject to the Land Disposal Restriction (LDR). The objective of the "Treatment Standards for Hazardous Wastes" in 40 CFR 268.40 is to develop concentration based levels or technology based treatment for treated wastes so that they may be safely land disposed. The land disposal treatment standards should "minimize threats" to human health and the environment, including any threat posed by "underlying hazardous constituents (UHCs) in characteristic wastes "Universal Treatment Standards" [40 CFR 268.48]. (See attachment 4 of the profile). For nonhazardous waste, this panel is available but not required.

To enter LDR information for a waste stream profile, perform the following tasks:

Note: This section applies to attachment 4 of the WPF.

1. Click on LDR information in the navigation panel of the waste stream profile form for the LDR information profile panel. (See Figure 4-29)

   Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. From the list provided, select a proper treatability group for your waste stream by checking the corresponding box.

   Note: Determine if the waste stream meets the Non-Wastewater, Wastewater treatability group, or the alternative treatment, 40 CFR 268.42(c), "Lab Pack." (See Table 10)

Figure 4-29

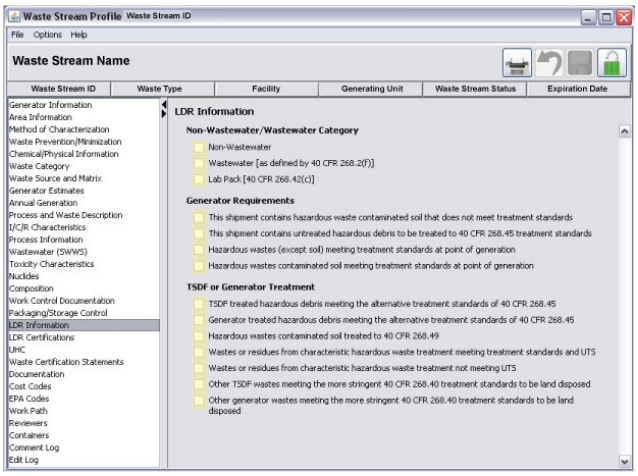


Table 10

Treatability Group	Criteria
Waste Water	• "Wastewaters are wastes that contain less than 1% by weight total organic carbon (TOC) and less than 1% by weight total suspended solids (TSS)" [40 CFR 268.2(f)].
Non Waste Water	• If the waste stream does not meet the definition for wastewater.
Lab Pack	• EPA hazardous waste numbers and certification will be added on the form to meet the requirement for the alternative treatment under 40 CFR. • Wastes that use the alternative lab pack treatment standard must be destined for incineration. **Note:** The EPA defines lab packs [40 CFR 264.316 or 265.316] as small containers of hazardous waste in overpacked drums (lab packs). The waste contains NONE of the waste specified in Appendix IV of Part 268 (D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, and U151). The waste contains NONE of the reactive waste specified in 40 CFR: • 261.23(a)(1) normally unstable and readily undergoes violent change without detonating; • 261.23(a)(2) reacts violently with water; • 261.23(a)(3) forms potentially explosive mixtures with water; • 261.23(a)(4) mixed with water, it generates toxic gases, vapors, or

	fumes "…to present danger…;" • 261.23(a)(6) "...capable of detonation…" if subjected to a strong initiating source or heated under confinement; • 261.23(a)(7) "…readily capable of detonation…" at standard temperature and pressure; and • 261.23(a)(8) is a forbidden explosive. [40 CFR 264.316(e)]. WDP-LLWD will include the appropriate EPA codes. A certification for lab packs containing hazardous waste to use the alternative treatment standard for lab packs will be included on the LDR Certifications panel. (See section 4.2.1.20)

3. If Lab Pack was selected, no other information is required for the LDR portion of the WPF. Skip to step 8. If Lab Pack was not selected, continue on to step 7.
4. From the lists provided, select either a generator requirement or a TSDF or generator treatment option for your waste stream by checking the corresponding box.

Note:

- The receiving TSDF needs to be informed that the waste either does or does not meet the applicable treatment standards with the required certification(s).
- For waste characterized at the point of generation, follow the subsection for "Generator requirements." For treated waste, follow the subsection for "TSDF or Generator Treatment." Descriptions for both generator requirements and TSDF or generator treatments are provided in the table below. (See Table 11)

Table 11

Generator Requirements are described as the following:	
Option	**Description**
This shipment contains hazardous waste-contaminated soil that does not meet treatment standards.	Check this box if you have hazardous soil that does not meet the treatment standards. 1) Check the treatability group box for NWW (since this is not WW). 2) Identify the UHCs in the waste stream that exceed the Universal Treatment Standards (UTS) limits by 10 times in order to meet the alternative 40 CFR 268.49 treatment standards. (See section 4.2.1.21) 3) Two certifications for contaminated soil will be included on the LDR Certifications panel. (See section 4.2.1.20) **Note**: If the hazardous waste soil meets the treatment standards (268.40 and/or 268.49) at the original point of generation, check box for "Hazardous Wastes-contaminated soil meeting treatment standards at point of generations" under the Generator Requirements subsection. WDP-LLWD will include the appropriate EPA codes and subcategories on

	the LDR form.
This shipment contains untreated hazardous debris to be treated to 40 CFR 268.45 treatment standards.	1) Check this box if you have untreated debris and would like it to be treated to the alternative 40 CFR 268.45 standard. 2) Check the treatability group box for NWW (since this is not WW). 3) Identify all potential UHCs. (See section 4.2.1.21) **Note**: In order for the treatment facility to determine the best treatment technology for the waste, all potential UHCs need to be identified. The contaminants subject to treatment in this hazardous debris are being treated to comply with 40 CFR 268.45. WDP-LLWD will include the appropriate EPA codes and subcategories on the LDR form. 4) This is just a notification; there is no certification required under 40 CFR 268.7(a)(2).
Hazardous wastes (except soil) meeting treatment standards at point of generation.	For example, this box is checked if all constituents in an F-listed waste are below the concentration based treatment standards under 40 CFR 268.40 at the point of generation. 40 CFR 268.7(a)(1) allows the determination of whether the hazardous waste meets the treatment standards either by testing the waste or by using acceptable knowledge of the waste. 1) Check this box if the waste at the point of generation meets the treatment standards. 2) Check the appropriate treatability group box. 3) A certification will be included on the LDR Certifications panel. (See section 4.2.1.20) WDP-LLWD will include the appropriate EPA codes and subcategories on the LDR form.
Hazardous wastes contaminated soil meeting treatment standards at point of generation:	For example, this box is checked if all constituents in an F-listed waste are below the concentration based treatment standards under 40 CFR 268.40 or 40 CFR 268.49 at the point of generation. 40 CFR 268.7(a)(1) allows the determination of whether the hazardous waste contaminated soil meets the treatment standards either by testing the waste or by using acceptable knowledge of the waste. 1) Check this box if the contaminated soil at the point of generation meets the treatment standards. 2) Check the appropriate treatability group box. 3) Two certifications will be included on the LDR Certifications panel. (See section 4.2.1.20) **Note**: If this is hazardous waste contaminated soil meeting treatment standards at the point of generation, the table under 40 CFR 268.7(a)(4) requires two certifications. There will be two certifications provided on

	the LDR form for signature. WDP-LLWD will include the appropriate EPA codes and subcategories on the LDR form.
If the hazardous waste does not fit into the descriptions listed above, complete the LDR form with the following:	1) Check the appropriate treatability group box. 2) Identify all potential UHCs if applicable. (See section 4.2.1.21) 3) This is just a notification; there is no certification required to meet 40 CFR 268.40 treatment standards. WDP-LLWD will include the appropriate EPA codes and subcategories on the LDR form.

TSDF or Generator Treatments are described as the following:

Note: This section pertains to treated waste from a TSDF, or less than 90-day generator treatment. Generator treatment requires different certifications than TSDF treatment, so the treatment facility/generator must check the appropriate TSDF or generator treatment box.

Option	Description
TSDF-treated hazardous debris meeting the alternative treatment standards of 40 CFR 268.45	Check this box for TSDF treatment if the hazardous debris has been treated to meet the alternative 40 CFR 268.45 treatment standards. 1) Check the treatability group NWW (since this is not WW). 2) List the untreated waste (original) WPF number(s) in the process description of this WPF. (See section 4.2.1.9) 3) List the description of treatment technology from 40 CFR 268.45, Table 1, in the process description section of the WPF. (See section 4.2.1.9) 4) The description of how the hazardous debris was originally generated will be provided by the original profiles (before treatment). 5) A certification is required to indicate these contaminants are compliant with 40 CFR 268.45.
Generator-treated hazardous debris meeting the alternative treatment standards of 40 CFR 268.45	Mark this box for generator treatment if the hazardous debris has been treated to meet the alternative 40 CFR 268.45 treatment standards. 1) Follow steps 1 through 4 as listed above under the TSDF treated hazardous debris. 2) Two certifications are required to indicate these contaminants are compliant with 40 CFR 268.45. **Note**: If the waste is disposed in a Subtitle D facility, the required notification will be sent to the State by ENV-RCRA with the information listed above plus the name and address of the Subtitle D facility. If the waste is disposed in a Subtitle C facility, then the notification would be

	provided to the Subtitle C.
Hazardous Waste Contaminated Soil treated to 40 CFR 268.49	Check this box if the hazardous waste contaminated soil has been generator treated or TSDF treated to meet the alternative 268.49 standards. The UHC must be treated to below 10 times UTS or a 90% reduction in the original concentration of the UHCs to meet this certification. The waste will be land disposed without further treatment. (See Guidance on Demonstrating compliance with Land Disposal Restrictions {LDR} Alternative Soil Treatment Standards) 1) Two certifications are required to indicate that the soil has been treated to meet the alternative 268.49 standards. 2) See additional certifications for soil treated to remove all characteristics by checking one of the following boxes listed in this subsection: "Waste or residue from characteristic hazardous waste meeting treatment standards and UTS" or "Waste or residue from characteristic hazardous waste treatment not meeting UTS." **Note**: Since the ultimate disposition of the waste is unknown at the time the waste profile form is completed (Subtitle C or Subtitle D landfill), the information listed below is required. 3) Check treatability group box NWW (since this is not WW. 4) WDP-LLWD will include the appropriate EPA codes (applied to waste after treatment) and subcategories on the LDR form.
Waste or residue from characteristics hazardous waste treatment meeting treatment standards and UTS	Check this box if the waste has been treated to remove all characteristics (268.40, or 268.49) and meets UTS for all UHCs after on-site treatment. The waste will be land disposed without further treatment. 1) The information from the original WPF, the WPF for the residue, and the certification constitute the notification required to meet 40 CFR 268.7(e) requirements. 2) Check the treatability group. 3) Identify all potential UHCs. (See section 4.2.1.21) 4) Two treatment certifications for waste or residue from characteristics hazardous waste treatment meeting treatment standards and UTS will be included on the LDR form for signature. WDP-LLWD will include the appropriate EPA codes for the treated waste, and subcategories on the LDR form.
Waste or residue from characteristic hazardous waste treatment not meeting UTS	1) Check this box if the waste is no longer hazardous, but does not meet UTS for all UHC(s). The waste will be shipped to another facility for further treatment. 2) Check the treatability group box. 3) Identify all potential UHCs. (See section 4.2.1.21)

	4) Two certifications will be provided on the LDR Certifications panel. (See section 4.2.1.20) 5) Complete the subsection under "Generator Requirement" for additional notification(s)/certification(s) so the waste can be shipped to another facility for further treatment.
Other TSDF wastes meeting the more stringent 40 CFR 268.40 treatment standards to be land disposed	1) Mark this box if the treated waste meets 40 CFR 268.40 treatment standards. 2) Check the treatability group. 3) A certification will be included on the LDR Certifications panel. (See section 4.2.1.20)
Other Generator wastes meeting the more stringent 40 CFR 268.40 treatment standards to be land disposed.	Follow steps 1 through 3 as listed above under Other TSDF wastes meeting the more stringent 40 CFR 268.40 treatment standards to be land disposed.
Other wastes that could not be treated to meet treatment standards 268.40, 268.45, or 268.49	Other wastes to be further managed at a different treatment or storage facility in order to meet treatment standards and UTS not achieved on-site (e.g. non-characteristic wastes treated in an accumulation area). 1) Complete the applicable subsection under "Generator Requirement" for notification(s)/certification(s) so the waste can be shipped to another facility for further treatment. 2) Complete the LDR Certifications panel. (See section 4.2.1.20) **Note**: TSDF requirement under 40 CFR 268.7(b)(1) and (2) requires the TSDF to test the residue of the treated waste. It is up to the facility

5. Click the save button to save all data entered into the LDR information profile panel.

4.2.1.20 LDR Certifications

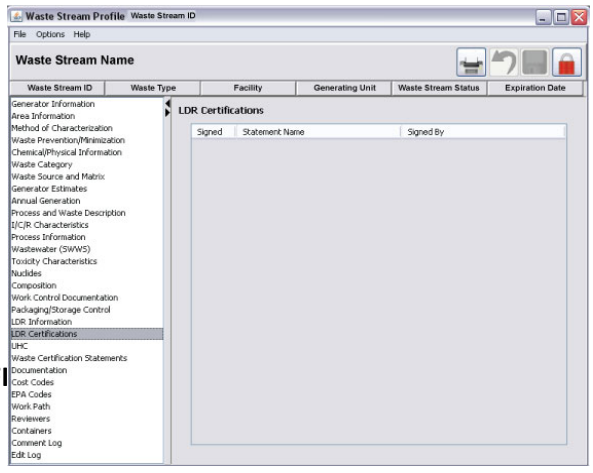
To certify previously selected LDR information for a waste stream profile, perform the following tasks:

Note: This section applies to attachment 4 of the WPF.

1. Click on LDR certification in the navigation panel of the waste stream profile form for the LDR certification profile panel. (see Figure 4-30)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.Click ok. The LDR certification profile panel will now be activated.

Figure 4-30



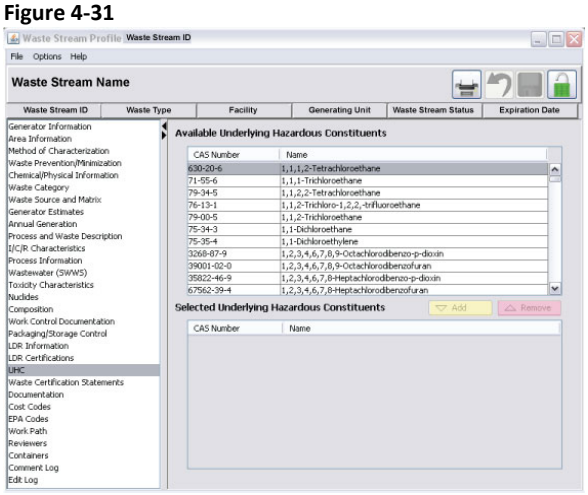
Note: Depending on what selections were made in the LDR information profile panel, a list of required signatures will be populated in the LDR certification table.

2. Select the signature you wish to execute and click sign.
3. Click the save button to save all data entered into the LDR certification profile panel.

4.2.1.21 Underlying Hazardous Constituents (UHC)

To add UHCs to a waste stream profile, perform the following tasks:

Figure 4-31



1. Click on UHC in the navigation panel of the waste stream profile form for the UHC profile panel to appear. (see Figure 4-31)

   Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. From the Available Underlying Hazardous Constituents table provided, select all constituents that apply to your waste stream by selecting the desired constituent and clicking the add button below the table.

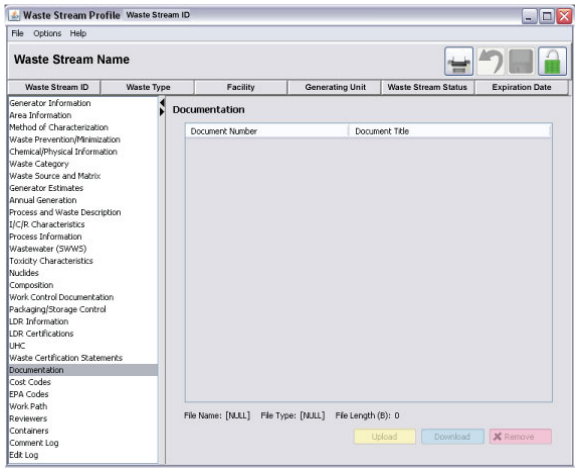
Note: Once a UHC has been added, notice it will appear in the Selected Underlying Hazardous Constituents table below. If you wish to remove a constituent from the Selected Underlying Hazardous Constituents table, select the desired constituent and click the remove button above the table.

3. Click the save button to save all data entered into the UHC profile panel.

4.2.1.22 Documentation

Figure 4-32

To attach documentation to a waste stream profile, perform the following tasks:



1. Click on Documentation in the navigation panel of the waste stream profile form for the Documentation profile panel to appear. (see Figure 4-32)

   Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. In the lower right corner of the Documentation profile panel, click the upload button.

3. Carefully read the document classification warning and click yes to continue.

Note:

- Any document uploaded into the WCATS application must be certified as unclassified and must have the appropriate authorized derivative classification (ADC) review performed.
- If the document is considered classified and/or has not been ADC reviewed it cannot be uploaded. Click no and you will be returned to the documentation profile panel.

Once the document has been certified, a Microsoft open dialog box appears for selecting a file.

4. Select the file you wish to upload and click open. A new row appears with the attached document information provided.

Note:

- The maximum file size supported is 10 MB.
- Supported file formats include: doc, docx, pdf, xls, ppt, and many more.

5. Click the save button to save the attached document in the documentation profile panel.

Note:

- Notice, file name, type and length for the selected document are displayed below the documentation table.
- To download a previously uploaded file, select the desired document from the documentation table and click the download button.
- To delete an uploaded document from the documentation table, select the desired document and click the remove button.

4.2.1.23 Cost Codes

To enter cost codes for a waste stream profile, perform the following tasks:

1. Click on cost codes in the navigation panel of the waste stream profile form for the cost codes profile panel to appear. (see Figure 4-33)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. From the drop down list provided, select a recharge mode.

NOTE: Recharge modes vary depending on the waste stream profile.

Recharge modes are defined in the table below. (See

Figure 4-33

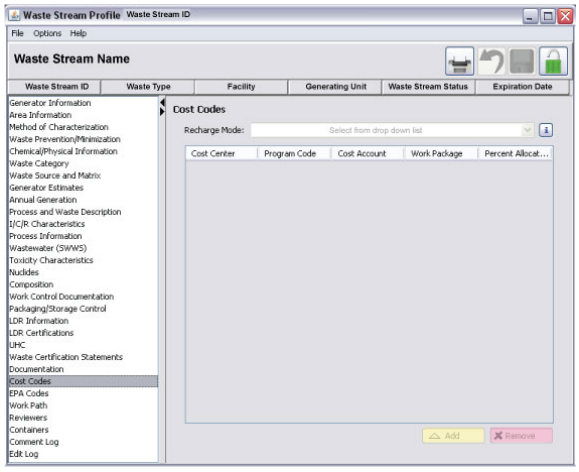


Table 12)

Table 12

Recharge Mode	Description
Selection List – or mode 1	Allows generators to select cost codes from a preselected list and apply percentages at their own discretion
Prorated – or mode 2	Allows generators to select cost codes from a preselected list with percentages predefined
Unconstrained – or mode 3	Allows generators to select from all active cost codes and apply percentages at their own discretion
Program Exempt – or mode 4	Similar to mode 1, except cost records are exempt

3. Once a recharge mode is selected, click the add button to deploy the cost center finder for preselecting cost codes.

   Note: If the unconstrained recharge mode was selected, cost codes do not need to be preselected.

4. In the cost center finder dialog box, enter a cost center code and/or description into the provided fields and click the search button identified as binoculars to populate a list of available cost centers that match the inserted criteria.

   Note: To clear all input fields, click the refresh button.

5. From the populated list, select the desired cost center and click ok to deploy the cost code finder.

6. In the cost code finder dialog box, enter a program code, cost account code, and/or work package code and click the search button identified as binoculars to populate a list of available cost codes that match the inserted criteria.

   Note: To clear all input fields, click the refresh button.

7. From the populated list, select the desired cost code and click ok.

   Note:

   - Notice the cost code table within the cost code profile panel is organized by cost center, program code, cost account code, work package code, and percent allocation per code.
   - Once additional cost codes are added to the table, percent allocation amounts can be defined by double clicking in the percent allocation column of the desired cost code and entering a numeric amount.
   - REMEMBER: percent allocations must equal to 100%.

- To remove a cost code from the table, select the code desired and click the remove button below the table.

8. Click the save button to save the cost code information in the cost code profile panel.

4.2.1.24 Reviewers/Signatures

To properly activate a waste stream profile, the following signatures and/or reviews must be obtained:

- Waste Generator Certification
- Waste Certifying Official
- Generator Support Services Review
- Generator Support Services QA Review
- ENV-RCRA Review
- (Specific Destination Site) Waste Review

Note: Signature requirements are determined upon waste type selection.

To sign off on a waste stream profile, perform the following tasks:

1. Click reviewers in the navigation panel of the manifest profile form to display the reviewers profile panel. (see Figure 4-34)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. Before signing, confirm that all information provided in the waste stream profile is correct and has been properly entered into the system.

Note:

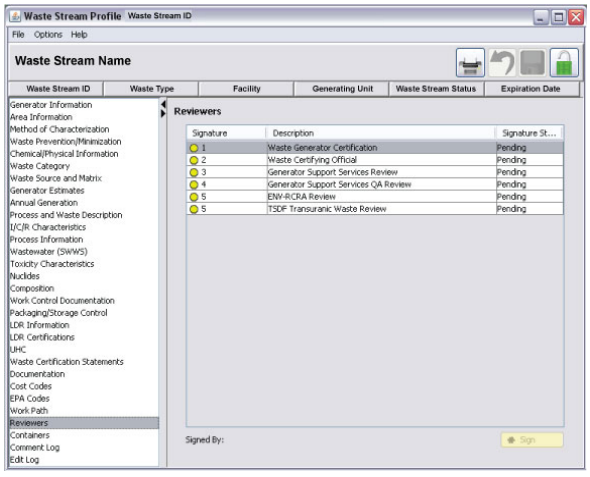
- Notice the reviewers table is organized by signature order, description and status.
- Signature order requires that the signatures requested be performed in the order defined.
- Signature statuses are as follows:

  Pending – awaiting signature; yellow dot

  Approved – signed; green dot

  Revoked – signature removed; red dot

Figure 4-34



3. Once confirmed, click the save button to ensure all information has been set in the waste stream profile.
4. Click the lock button to prevent further editing of the waste stream profile and to enable the sign button located on the reviewers profile panel.

5. Select the signature assigned to you and click the sign button below the table.
6. Carefully read the waste stream signature authorization warning and click approve to endorse the waste stream profile.

Note:

- Endorsing a waste stream declares that you have fully reviewed all forms and associated attachments and certifies that all information provided appears to be complete, accurate, and meets WAC requirements.
- If you do not approve of the waste stream profile, click the revoke button to disapprove the profile.
- If a profile has been revoked, a comment regarding the revoking action can be entered into the comment log of the waste stream profile. (see section 4.2.1.26)
- If you do not approve or disapprove at this time, simply click cancel to return to the waste stream profile.
- If you would like to raise a concern with another WCATS user regarding the open profile, the profile can be shared via file | share profile in the menu bar. (see section 2.1.6.1)

7. Once the approve/revoke button has been clicked, a waste stream validation results dialog box appears providing information regarding the execution of the endorsement.

Note: An endorsement can either pass or fail. If your endorsement has failed, please contact Waste Help at wastehelp@lanl.gov or 5-2494.

8. In the waste stream validation results dialog box, click the ok button to return to the *Signatures* panel of the waste stream profile.

Note: Once a signature has been performed, the status will change within the reviewers table and signatory information is displayed below.

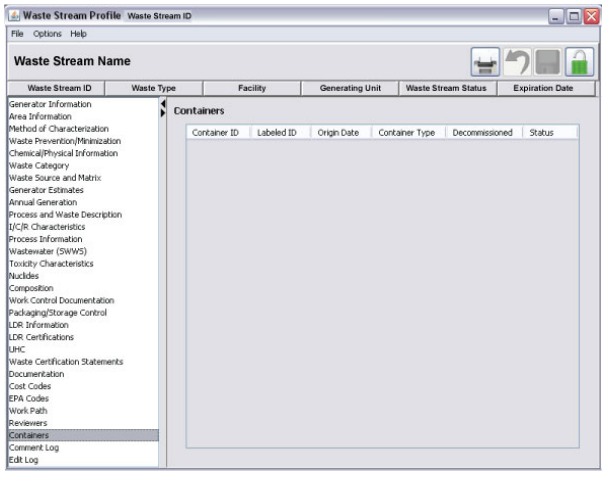
4.2.1.25 Containers

The application keeps a log of all WCATS containers assigned to a waste stream. To view the container log for any given waste stream, perform the following tasks:

1. Click containers in the navigation panel of the waste stream profile form to display the container log profile panel. (See Figure 4-35)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

Figure 4-35



Note:

- Notice the container log is organized by container ID, Labeled ID, Origin date, Container Type, Decommissioned status, and Container Status.
- To view information regarding a particular container assigned to the waste stream, double click on the container in the containers log to deploy the container profile.

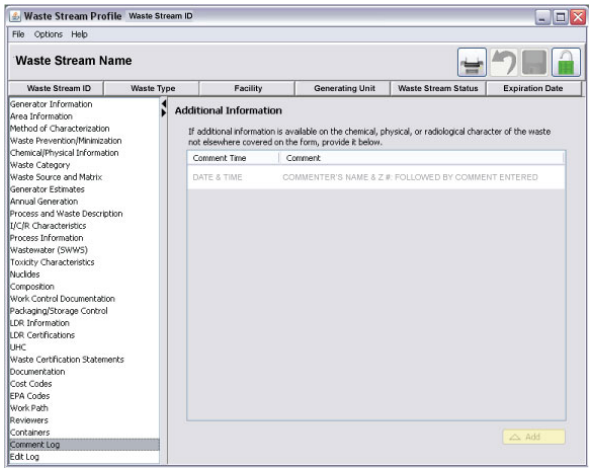
4.2.1.26 Comment Log

The application allows users to document comments on a waste stream for further viewing. To add a comment to a waste stream, perform the following tasks:

1. Click comment log in the navigation panel of the waste stream profile form to display the comment log profile panel. (see Figure 4-36)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

Figure 4-36



2. To add a comment to the log, click the add button in the bottom right corner of the comment log profile panel.

Note:

- Notice the comment log is organized by comment time and comment text.
- WARNING: All comments made on any profile within the WCATS application are permanent and irrevocable.
- There is no restriction to the length of the comment.

3. In the new waste stream comment dialog box, enter your comment concerning the open waste stream and click ok to place the comment into the comment log.
4. Click the save button to ensure all information has been set in the waste stream profile.

4.2.1.27 Edit Log

The application keeps a log of all edits made to any profile created. To view the edit log for any given waste stream profile, perform the following tasks:

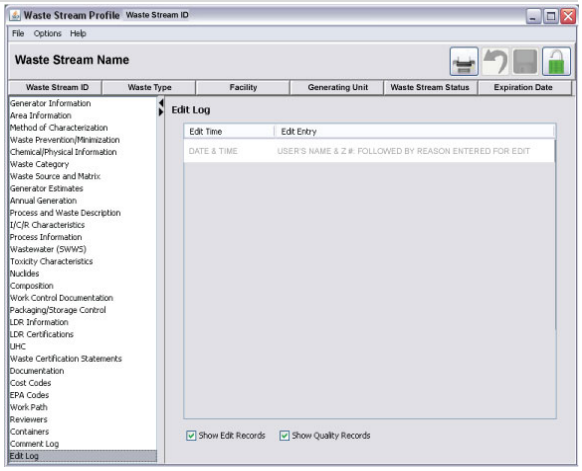
1. Click edit log in the navigation panel of the waste stream profile form to display the edit log profile panel. (see Figure 4-37)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

Note:

Figure 4-37

- Notice the edit log is organized by edit time and edit information provided by the editor.
- To view all edit records, records showing each time the profile was unlocked for editing, click/check on the show all edit records option.
- To view all quality records, records showing each time data was entered into the profile, click/check on the show all quality records option.
- The edit log is permanent and not editable.



4.2.2 Stage II: Reviewing a Waste Profile Form (WPF)

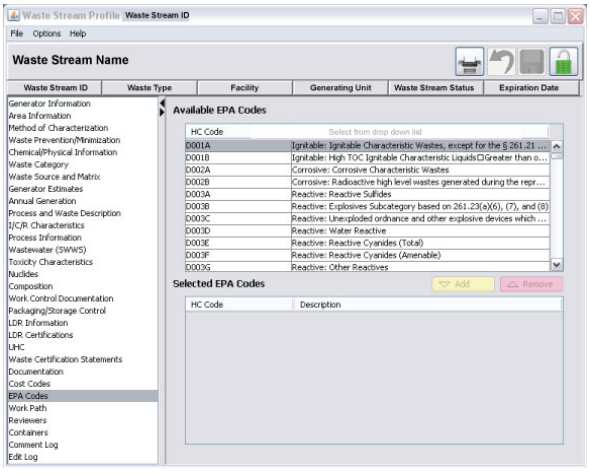
Once the initial entry stage is complete, the WPF waste stream then enters the reviewing stage. Certain reviewing tasks are only to be performed by certified waste management coordinators (WMC). Although the waste generators will have read-only access to these few panels, upon the completion of their portion of the waste stream entry stage, these panels will remain unlocked for completion by the WMC.

Note: WMCs are also able to edit all entry stage panels prior to the generator signing off. Once the generator's signature has been executed, all entry stage panels will be locked from further editing.

4.2.2.1 EPA Codes

Figure 4-38

To add EPA codes to a waste stream profile, perform the following tasks:



1. Click on EPA Codes in the navigation panel of the waste stream profile form for the EPA Codes profile panel to appear. (see Figure 4-38)

   Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. From the Available EPA Codes table provided, select all EPA codes that apply to your waste stream by selecting the desired EPA code and clicking the add button below the table.

Note:

- Once an EPA has been added, notice it will appear in the Selected EPA Codes table below.

- If you wish to remove an EPA code from the Selected EPA Codes table, select the desired EPA code and click the remove button above the table.

3. Click the save button to save all data entered into the EPA Codes profile panel.

4.2.2.2 Work Paths

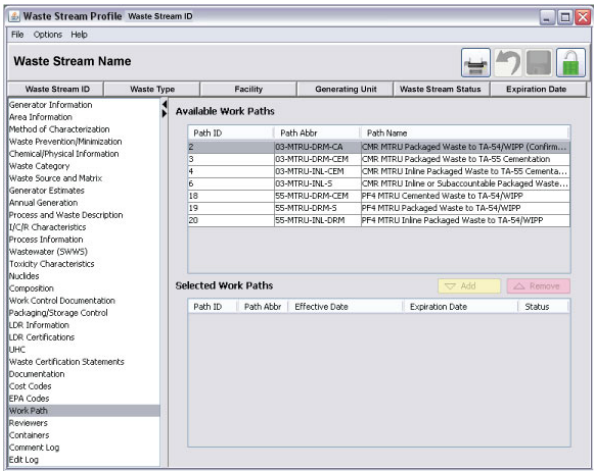
Work paths are predefined courses-of-action designed to ensure proper handling of a waste item within the cradle-to-grave process. For more information on work paths, see section 2.1.6.8.

To assign a work path to a waste stream profile, perform the following tasks:

1. Click on work path in the navigation panel of the waste stream profile form for the work path profile panel to appear. (see Figure 4-39)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

Figure 4-39



2. From the Available work paths table provided, select all work paths that apply to your waste stream by selecting the desired work path and clicking the add button below the table.

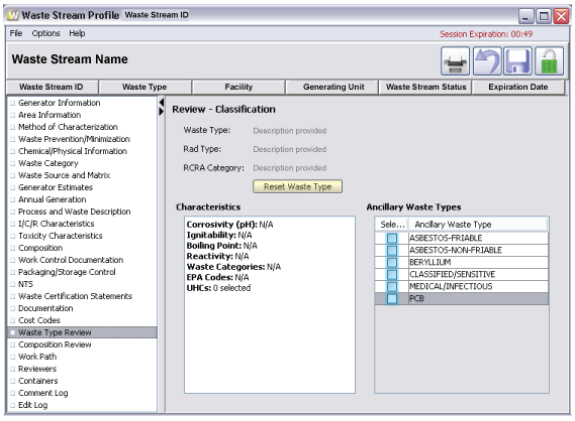
Note: Once a work path has been added, notice it will appear in the selected work paths table below. If you wish to remove a work path from the selected work paths table, select the desired work path and click the remove button above the table.

3. In the selected work path table, enter an effective date and expiration date for the added work path by clicking in the respective column.
4. From the drop down list provided, select a status for the added work path.
5. Click the save button to save all data entered into the EPA Codes profile panel.

4.2.2.1 Waste Type Review

To execute a waste type review, perform the following tasks:

Figure 4-40



1. Click on waste type review in the navigation panel of the waste stream profile form for the waste type review panel to appear. (see Figure 4-40)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. Review the classification information provided.
3. If the classification information is correct, skip to step 7, if not, click the reset waste type button to deploy the waste type reset dialog box.
4. Review the reset statement and enter any comments pertaining to the action.
5. Click yes to deploy the view the list of available waste types for selection.
6. From the list provided, select the correct waste type and click ok.

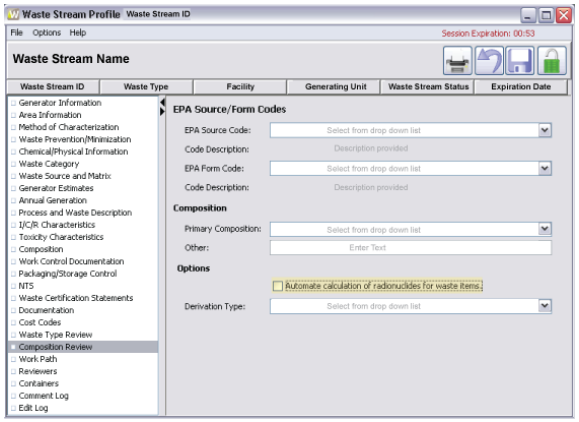
Note: Once a new waste type has been selected, all previous signatures will be revoked and the waste stream profile panels will be modified to reflect the newly selected waste type.

All modified panels will need to be completed and all required signatures will need to be re-obtained before proceeding.

7. From the table provided in the lower right, select any ancillary waste types to be added to the profile.
8. Click the save button to save all data entered into the waste type review profile panel.

4.2.2.2 Composition Review

Figure 4-41



To execute a composition review, perform the following tasks:

1. Click on composition review in the navigation panel of the waste stream profile form for the composition review panel to appear. (see Figure 4-41)

Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. From the drop down lists provided, select an EPA source code and an EPA form code for the waste stream.

Note: Notice, once selections are made, a more detailed description is provided below the drop down box.

3. From the drop down list provided, select a primary composition.

Note: If the primary composition you desire is not available, one can be entered in the other field provided.

4. If you would like for WCATS to automate calculations of radionuclides for waste items, click the check box provided.
5. If you have checked the automated calculations check box, select a derivation type from the drop down box provided.

6. Click the save button to save all data entered into the composition review profile panel.

4.2.2.3 Reviewers/Signatures

See section 4.2.1.24

4.2.3 Documenting TRU Acceptable Knowledge (TRU-AK)

Acceptable knowledge (AK) is a method used by waste generators to document the characterization of waste in lieu of sampling and analysis. Although sampling and analysis via approved methods is the most valid method of characterizing waste, AK documentation is considered a satisfactory substitute for analytical data if documented completely and properly.

Generators of chemical waste must determine if their waste is hazardous either analytically or by applying acceptable knowledge. Lab wide, acceptable knowledge is considered to be all data pertaining to hazardous characteristics of the waste in regards to materials and/or processes used. An acceptable knowledge waste stream, as understood in WCATS, is used to document or reference the characteristics of a transuranic waste stream in accordance with WIPP and Central Characterization Project (CCP) requirements.

Within the AK waste stream profile, users will describe the waste, generating process, radiological and hazardous characteristics, acceptable work paths, and information necessary to manage the waste at the generating facility.

> **Note:** Before you begin, you should have all documentation concerning the new waste stream on hand, such as assay/survey results and any AK documentation.

4.2.3.1 General Information

The general information panel provides the foundation for the creation of a new waste stream profile. Once the waste type has been selected within the general information panel, the application can then identify which panels are required to produce a complete WPF waste stream profile. Profile panel options specific to the selected waste type will not appear until the general information panel has been saved.

To enter general information to a newly created waste stream, perform the following tasks:

1. Within the general information profile panel of the Create New Waste Stream Profile form, enter a proper waste stream name in the waste stream name field. (e.g., AS: ASH LEACH)

   > **Note:** A proper waste stream name includes an identifiable abbreviation followed by a colon and the full technical waste stream name.

2. From the drop down list in the waste type field, select the waste type for your waste stream. (e.g., MTRU-AK)

Note:

To create an AK waste stream, select a waste type that includes the letters AK in the abbreviation. Waste types, that do not include the AK abbreviation, are considered WPF waste streams. For more information on WPF waste streams see section 4.2.1.

In the entry stage, waste type selection is based on estimation. Waste type assignment is not final until the final classification stage.

3. From the drop down lists provided in the generating area section, select a company, facility and service unit for the waste is to be generated.

Note: More specific generation location information, pertaining to TA, building, and room will be requested in the Site Area panel.

4. In the technical contacts section, select a generator and coordinator for the waste stream by clicking on the search button identified as binoculars, to deploy the person finder form.

Note:

As a user logged on to the WCATS application, your workstation should automatically enter your information into the technical contact field.

If you don't have a WMC, contact Generator Support Services or Waste Management Coordinator group for assistance.

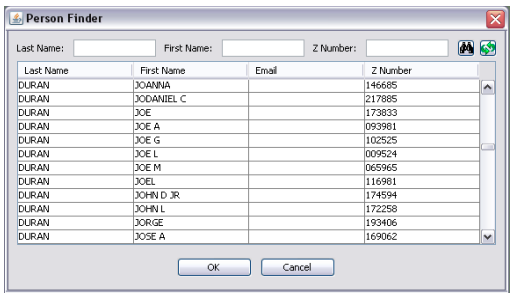


Figure 4-42

5. Inside the person finder form (see Figure 4-42) enter the contact's last name, first name, and/or Z number into the related fields.

Note: To clear all fields, click the refresh button located next to the search button.

6. Once the data has been entered, click the search button to load all available contact options.

Note: If the person you are looking for is not listed, a new person profile can be created in the administrative forms navigator.

7. Once a contact has been selected, click the ok button to enter the data into proper field.
8. Click the save button on the toolbar to set the general information panel.
9. Once the success notice appears, click OK to continue.

Note:

- The waste stream ID number is produced automatically by the application and can be seen upon saving.
- Notice, once saved, the general information panel displays more fields for completion.

10. From the drop down list provided, select a process/status code for the waste stream.

11. If the waste is considered a defense waste, check the box provided.
12. If the waste is considered liquid waste, check the box and enter the amount of liquid waste in g/cm³ in the field provided.
13. Click the save button on the toolbar to set this portion of the general information panel.

Note: To view more details on any of the items in the profile panel, click on the view button represented as a magnifying glass next to the item to deploy the corresponding profile form.

4.2.3.2 Process Information

To add process information to a waste stream profile, perform the following tasks:

1. Click on process information in the navigation panel of the waste stream profile form for the process information profile panel to appear. (see Figure 4-43)

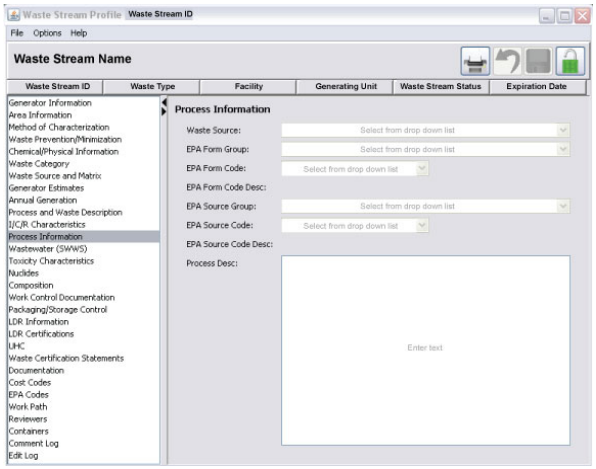
Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. From the drop down list in the waste source field, select the waste source for your waste stream. (e.g., Waste Source A: Materials Processing/Production)
3. From the drop down list in the EPA form group field, select the EPA form group for your waste stream. (e.g., Inorganic Solids)
4. From the drop down list in the EPA form code field, select the EPA form code for your waste stream. (e.g., W307)

Note: Once the EPA form code has been selected, notice a description appears below.

5. From the drop down list in the EPA source group field, select the EPA source group for your waste stream. (e.g., Wastes from Ongoing Production and Service Processes)

Figure 4-43



6. From the drop down list in the EPA source code field, select the EPA source code for your waste stream. (e.g., G05)

Note: Once the EPA source code has been selected, notice a description appears below.

7. In the field provided, enter a detailed process description for your waste stream.
8. Click the save button to save all data entered into the process information profile panel.

4.2.3.3 Waste Category

(See section 4.2.1.6)

4.2.3.4 EPA Codes

(See section 4.2.2.1)

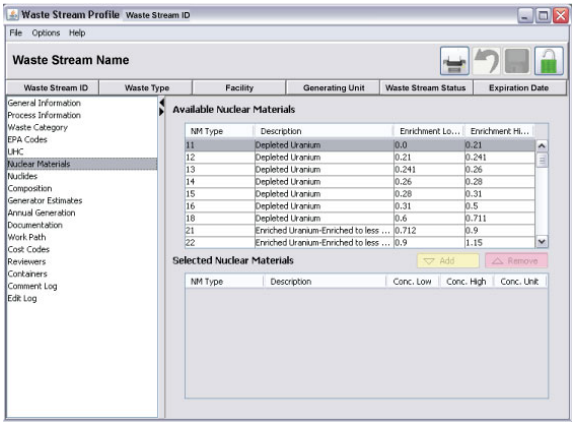
4.2.3.5 Underlying Hazardous Constituents (UHC)

(See section 4.2.1.21)

4.2.3.6 Nuclear Materials

To add Nuclear Materials to a waste stream profile, perform the following tasks:

Figure 4-44



1. Click on nuclear materials in the navigation panel of the waste stream profile form for the nuclear materials profile panel. (see Figure 4-44)

   Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. From the available nuclear materials table provided, select all nuclear materials that apply to your waste stream by selecting the desired material and clicking the add button below the table.

   Note:

   - Once a nuclear material has been added, notice it will appear in the selected nuclear materials table below.
   - If you wish to remove a nuclear material from the selected nuclear materials table, select the desired material and click the remove button above the table.

3. Once the newly added nuclear material is entered into the selected nuclear materials table, the concentration amounts can be entered by double clicking in the corresponding columns.

   Note:

   - The concentration unit is automatically set to g/Kg.
   - If you wish to change the concentration unit, click in the corresponding column and select from the provided drop down list.
   - If you wish to remove a material from the selected nuclear materials table, select the desired material and click the remove button above the table.

4. Click the save button to save all data entered into the nuclear materials profile panel.

4.2.3.7 Nuclides

To add Nuclides to a waste stream profile, perform the following tasks:

1. Click on Nuclides in the navigation panel of the waste stream profile form for the Nuclides profile panel. (see Figure 4-45)

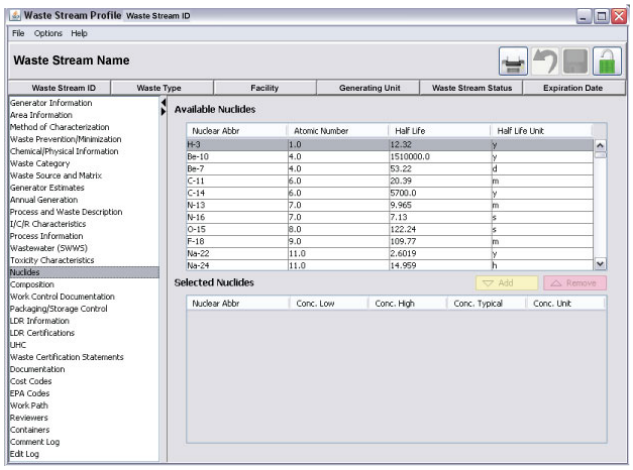
   Note: To reopen and unlock a previously created profile, see sections 4.3.1.1 and 4.3.1.2.

2. From the Available Nuclides table provided, select all Nuclides that apply to your waste stream by selecting the desired Nuclide and clicking the add button below the table.

   Note:

   - Once a Nuclide has been added, notice it will appear in the Selected Nuclides table below.
   - If you wish to remove a Nuclide from the Selected Nuclides table, select the desired Nuclide and click the remove button above the table.

Figure 4-45



3. Once the newly added nuclide is entered into the selected nuclides table, the concentration amounts can be entered by double clicking in the corresponding columns.

   Note:

   - The concentration unit is automatically set to g/Kg.
   - If you wish to change the concentration unit, click in the corresponding column and select from the provided drop down list.
   - If you wish to remove a nuclide from the selected nuclides table, select the desired nuclide and click the remove button above the table.

4. Click the save button to save all data entered into the nuclides profile panel.

4.2.3.8 Composition

(See section 4.2.1.12)

4.2.3.9 Generator Estimates

(See section 4.2.1.7)

4.2.3.10 Annual Generation

(See section 4.2.1.8)

4.2.3.11 Documentation

(See section 4.2.1.22)

4.2.3.12 Work Path

(See section 4.2.2.2)

4.2.3.13 Cost Codes

(See section 4.2.1.22)

4.2.3.14 Reviewers

(See section 4.2.1.24)

4.2.3.15 Containers

(See section 4.2.1.25)

4.2.3.16 Comment Log

(See section 4.2.1.26)

4.2.3.17 Edit Log

(See section 4.2.1.27)

4.3 Managing a Waste Stream Profile

The waste stream profile holds all relevant information pertaining to one waste stream. Within a waste stream profile, a user can gain valuable information as to the creation, usage and maintenance of any waste stream. Even though this provides users with a more resourceful electric form, users are also able to print out a valid Waste Profile Form to keep as a hard copy.

Each waste stream profile has a menu bar, tool bar, header bar, navigation panel and profile panel (See section 2.1.4).

4.3.1.1 Reopening a Waste Stream Profile

A previously created waste stream profile can be reopened via the following routes:

From the main application page menu bar:

1. Select file | find | waste stream | by waste stream ID, waste stream name or WPF number.
2. In the input dialog box, enter the waste stream ID, waste stream name, or WPF number depending on what option was previously selected.
3. Click ok to deploy the waste stream navigator showing all profiles that match the previously entered search criteria.
4. From the populated list, select the desired waste stream profile and double click to open.

From the waste stream navigator menu bar:

1. Select options | find waste stream | by waste stream ID, waste stream name or WPF number.
2. In the input dialog box, enter the waste stream ID, waste stream name, or WPF number depending on what option was previously selected.
3. Click ok to deploy the waste stream navigator showing all profiles that match the previously entered search criteria.
4. From the populated list, select the desired waste stream profile and double click to open.

From the waste stream navigator navigation panel:

1. Select the search path you wish to explore by from the drop down list in the lower left corner.
2. In the navigation panel, click the expand button next to the desired company to view the available facilities.
3. Double click on the desired facility to view either the service unit, waste type, generator, or WMC options depending on what search path was selected.
4. Select the service unit, waste type, generator, or WMC desired to display the available waste streams for that option.
5. From the populated list, select the desired waste stream profile and double click to open.

Note:

- If you have recently viewed a waste stream profile, it can quickly be reopened via Waste Streams in the recent option of the main application page menu bar.
- Waste stream searches based on ID report exact matches only.
- Waste stream name and WPF number searches are wildcards and report any waste streams matching any information, even partial information, entered.

4.3.1.2 Unlocking a Waste Stream Profile for Editing

Once a waste stream profile has been created, it can be reopened and unlocked for editing at any time prior to being signed by the waste generator. To unlock the waste stream profile, perform the following tasks:

6. Within an opened waste stream profile, click on the red lock button in the upper right corner.

7. In the input request dialog box, enter a valid reason for requesting authority to alter the profile.
8. Click ok to submit the request and unlock the profile.

Note:

- If access has been authorized, the lock icon will now be seen as a green open lock and all editable attributes will be enabled.
- If access has been denied, an error message will appear stating the user is not authorized to edit the open profile. If access has been denied, contact Waste Help for more information at 5-2494 or at wastehelp@lanl.gov.

4.3.1.3 Sharing a Waste Stream Profile

To share a waste stream profile with other users, see section 2.1.6.1.

4.3.1.4 Extending a Waste Stream Profile

The WPF waste stream is considered valid for use for a period of one year after it has been fully activated. Profiles which have been expired for less than two years or which will expire in the next two months may be extended within WCATS by an authorized user as long as the information remains accurate, complete, and up-to-date.

Note: Only generators or waste management coordinators who are authorized in the waste profile form's facility may extend profiles.

Generators can extend a WPF waste stream by performing the following tasks:

1. Within the opened waste stream profile, select options | extend profile to deploy the waste stream extension dialog box.
2. Select the yes button to initiate the extension.
3. Verify that the correct generator is still assigned to the waste stream by selecting the yes radio button.
4. Verify that the correct WMC is still assigned to the waste stream by clicking the yes radio button.
5. Verify that the generating process for the waste stream has not changed by clicking the no radio button.

Note: All steps must be answered as shown above for the extension to be processed. If the user does not respond in this way, the user will be returned to the open waste stream and the extension process will be aborted.

Once this is done, the user is returned to the open profile which now shows the expiration date of one year from the date of the last expiration date. If the expiration date was more than one year ago, the preceding steps may need to be repeated so that the profile will become valid with an expiration date in

the future. If the extension was not processed due to changes in the technical contact information or processes, a new waste stream must be created reflecting all modified data (see section 4.3.1.5).

> **Note:** If the waste stream is no longer valid after reaching its expiration, it must be voided within the system to avoid further use (see section 4.3.1.6).

4.3.1.5 Copying a Waste Stream Profile

Often a waste stream cannot be extended due to minor adjustments to the waste operations. Instead of creating a completely new waste stream profile, WCATS offers a copy function that allows the generator to utilize the preexisting data to create a new waste stream profile. By copying the available profile, generators are then able to update any data and create a new waste stream profile without having to re-enter any unaltered data.

> **Note:** If a similar profile needs to be created for another facility, the copy profile function can be used to save time in completing the profile.

To copy a WPF waste stream profile, perform the following tasks:

1. Within the opened waste stream profile, select options | copy profile.
2. If you wish to create a copy of the open waste stream profile in another facility, select yes and choose the facility. Otherwise, select copy.
3. Once the waste stream copy successful dialog box appears, click ok to open the copied profile. The profile will now be open for editing.

> **Note:** To edit the copied profile, refer to the creating a waste stream profile instructions (see section 4.2).

4.3.1.6 Voiding a Waste Stream Profile

Once a waste stream has is no longer applicable for use, the generator must void the waste stream. Also, if a new waste stream has been created as a copy due to adjustments needing to be made from a previous waste stream, the previous must be then voided to ensure it is no longer available for use.

To void a WPF waste stream profile, perform the following tasks:

1. Within the opened waste stream profile, select options | change status | void.
2. After reviewing the statement provided in the waste stream void dialog box, click the yes button to void the profile.
3. Once the waste stream void successful dialog box appears, click ok to return to the open profile.

> **Note:** Notice, once the profile has been voided, the status within the header bar will show voided.

5 Generating and Managing Waste

As waste is generated in the real world, WCATS must be kept up-to-date as it manages the inventory record. This section introduces the concepts for managing waste in container records and some tools for managing those container records, including work paths, the mobile audit support tool, and several ways to enter waste into the system.

5.1 General Concepts

A container record should be created in WCATS as soon as a generator declares it as waste. This allows the system to maintain an accurate inventory. TRU and Mixed TRU waste at LANL must be characterized using the Visual Inspection process, which is outlined in section 5.3.1. Other types of waste are characterized using the waste identification tool on the mobile device (see 5.2.1).

5.1.1 Mobile Audit Support Tool

WCATS offers a read-only audit support tool that allows users in the field to review items in the WCATS inventory via the mobile application. The audit support tool can display most of the information shown on the desktop container profile. To view an item via the audit support tool, perform the following tasks:

1. Within the WCATS mobile device task selection screen, select audit support tool and click continue to enter an item ID for lookup.
2. Once in the item inventory screen, scan a WCATS barcode or the container's labeled id in the field provided and click *Search*.
3. Once the item has been recognized, the item information is displayed for review.

Note:

- Notice, data is organized within the following tabs located at the bottom of the screen: General Info, Rad/Haz, Items, Task History, Shipping Description, and Other.
- For any data where more detailed information is available, a hyperlink is provided.

4. If desired, a label for the open container can be printed by selecting Options > Print Label.

5.1.2 Work Paths

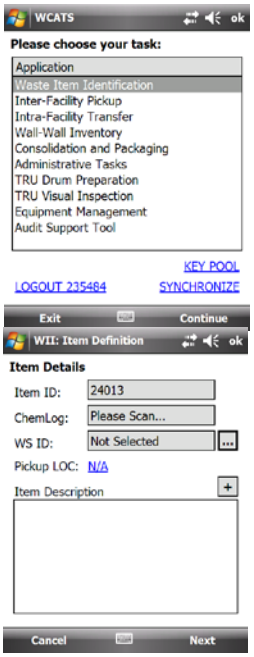
Although work paths are not created by typical end-users, it is important for users of the system to understand how work paths work. Work paths are created in the system to provide work flow for containers. The tasks that a container will need to take are represented by service units on the work path. There are many options for work path operations, including

- **Strict workflow** (with or without the option to manage a container's location) prevents a container on the work path from being included in tasks that are not listed on the work path.
- **Permissive workflow** does not restrict the container from being included on other tasks. The container only receives credit for tasks performed in order on the work path.
- **Historical credit** means that a container will get credit for tasks on the work path that have been completed before the container was assigned to the work path.
- **Repeatable tasks** can be performed one or more times as long as subsequent tasks in the work path have not yet been completed.
- **Optional tasks** do not have to be performed. Once subsequent tasks are completed the optional task can no longer be performed.
- **One-of-n tasks** are those where exactly one of a given set of tasks may be performed.
- **Blocking other tasks** provides extra customization for permissive workflow by preventing other tasks from being performed when a tasks that blocks others is pending.

Work paths can be set up in the application by an application administrator. The functionality listed above is built in to WCATS and requires no additional programming. Each work path is set up for a specific waste type. Work paths are set as available for containers by managing them on the waste stream. Panels that are shown on a container profile are determined by the panels selected within the 'Related Panels' screen on a work path profile.

5.2 Generating and Managing Non-TRU Waste

5.2.1 Waste Item Identification (WII) Using the Mobile Device



5.2.1.1 Creating a New Waste Item

1. Within the WCATS mobile device task selection screen, select waste item identification and click continue to display the pending items table.
2. Within the pending items screen, click the add button to create a new waste item.

   Note: Notice, a new WCATS item ID is assigned.

3. If the item has a ChemLog or pre-printed WCATS barcode, scan the barcode to enter the information into the barcode field provided.

   Note: If a barcode is scanned, the mobile device will retrieve the applicable data (weight, volume, description, etc…) for the waste item from the ChemLog database.

4. Select a waste stream for your item by clicking the "…" button to view the waste stream selection options.
5. To select a waste stream, see options below:

Select by: Manual Entry of WS ID	**Select by:** Generator or WMC	**Select by:** Location	**Select by:** Recent
If the WS ID is known, enter the known ID in the field provided using the mobile keypad and click ok.	Select the by generator or WMC option and click ok to view all available waste streams for the logged in user. To change the generator/WMC contact, click the hyperlink provided and search for an alternate person by providing the first name, last name and/or Z number in the field provided and clicking the search button. Once the desired result is provided, click ok to view the available waste streams for the selected person.	To search by location, select the by location option and click ok to view the select waste stream screen. Select a company, facility and service unit from the drop down lists provided to populate the available waste streams for the desired location. **Note**: Available facility options depend on company selection. Available service unit options depend on facility selection.	A list of recently used WS IDs is provided in the table below the selection options. If desired, select a recent WS ID and click ok.

6. Once a waste stream has been selected, verify the item description provided is correct.

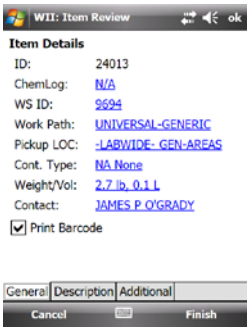
   Note:

   - Users can choose to use a predefined item description (waste stream name, waste description, or process description) by clicking the "+" button and selecting from the drop down list provided.
   - If the user changes the waste stream, a notice appears informing that the waste stream has been changed and asks whether you would like to update the waste description. If you would like to update the waste description, you can do so by using the keypad provided.

- To clear all previously entered text, click the "+" button and select clear from the drop down list provided.

7. Verify the waste item pick-up location generated by the waste stream selection.

Note: If not correct, click the provided hyperlink to select an alternate pickup location. Once in the item location selection screen, click the hyperlinks provided to select a company, facility, and unit and click ok to return to the item summary screen.



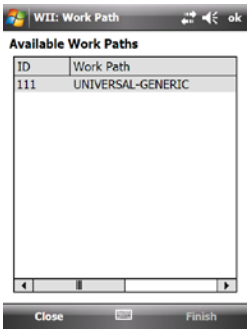
8. Once the waste item details have been established, click next to view the item review screen.

From within the item summary screen, review the waste item details for the newly created item. Each property for the item is also a hyperlink, allowing the user to click on the link to modify each property directly.

Note: The waste item description can be viewed or altered by selecting the *'Description'* tab at the bottom of the item summary screen.

5.2.1.2 Assigning Work Paths

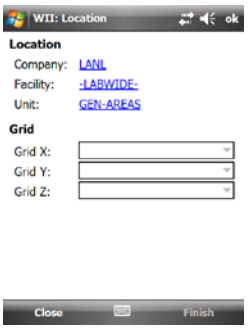
To assign a work path for a waste item, perform the following tasks:



1. Within the item review screen, click the preset hyperlink to enter the available work paths screen.
2. Within the available work paths screen, select the desired work path from list provided.
3. Once a selection has been made, click close to return to the item review screen.

5.2.1.3 Modifying the Location

To modify the location for a waste item, perform the following tasks:



1. Within the item review screen, click the preset hyperlink to enter the item location screen.
2. Within the item location screen, the company, facility, and/or service unit can then be modified via each individual hyperlink.

Note:

- By clicking on each hyperlink, the user is then directed to the company, facility, or service unit selection screen where a list of available locations is then presented for selection.
- Facility options are driven by company selection.
- Service unit options are driven by facility selection.

3. If desired, a user can also enter the grid location for the waste item. To do so, select the grid x, y, and z components from the drop down lists provided.

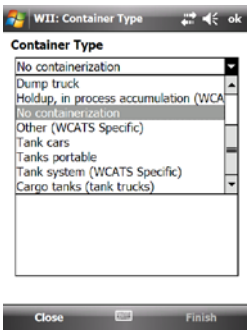
Note:

- Facility=TA, Unit=building, and the X component=room number.
- X, Y, and Z grid components refer to the specific storage/disposal area.

4. Once all selections have been made, click close to return to the item review screen.

5.2.1.4 Selecting a Container Type

To select a container type for the waste item, perform the following tasks:



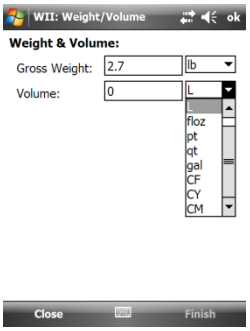
1. Within the item review screen, click the preset hyperlink to enter the container type screen.
2. Within the container type screen, select a container type from the drop down list provided to populate all available sub containers.

Note: Container type is automatically set to no containerization for all waste items.

3. From the list populated, select the desired sub container.
4. Once a selection has been made, click close to return to the item review screen.

5.2.1.5 Entering Weight and Volume Amounts

To enter weight and volume amounts for the waste item, perform the following tasks:



1. Within the item review screen, click the preset hyperlink to enter the weight and volume screen.
2. In the fields provided, enter a gross weight and a volume amount for the waste item.

Note: The unit of measure is automatically set to pounds (lbs.) for weight and liters (L) for volume. To change the unit of measure, select from the drop down list provided for each.

3. Once both amounts have been entered, click close to return to the item review screen.

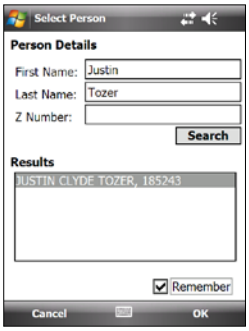
Note: If the gross weight or volume amounts have not been entered correctly, a notice will appear stating that the item must have a valid weight or volume.

5.2.1.6 Selecting a Technical Contact

To select the technical contact for the waste item, perform the following tasks:

Note: The technical contact defaults to that of the selected waste stream.

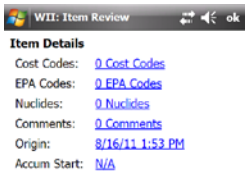
1. Within the item review screen, click the contact hyperlink to enter the person details screen.
2. In the fields provided, enter a first name, last name and/or z number to search for the desired contact.
3. Once information has been entered, click the search button to display the results in the box provided.
4. From the results box, select the desired contact and click ok to return to the item review screen.



Note: For convenience, technical contact information can be remembered for future use by checking the remember checkbox provided.

5.2.1.7 Entering Cost Code Information

To enter cost code information for the waste item, perform the following tasks:



1. Within the item review screen, select the additional tab at the bottom of the screen.
2. Within the additional tab, click the Cost Codes hyperlink to enter the cost codes screen.

Note: Notice the recharge mode is defined above the cost code table.

3. To add a cost code, click the add button to enter the cost centers screen.
4. In the field provided, enter a cost center filter and click search to populate a list of available cost centers.

Note: The filter will display all cost centers that contain a matching value to that which has been entered into the provided field.

5. From the list of matching cost centers, select the desired cost center and click next to display the project codes screen.
6. In the field provided, enter a project code filter and click search to populate a list of available project codes.

Note: The filter will display all project codes that contain a matching value to that which has been entered into the provided field.

7. From the list of matching project codes, select the desired code and click next to display the work packages screen.
8. In the field provided, enter a work package filter and click search to populate a list of available work packages.

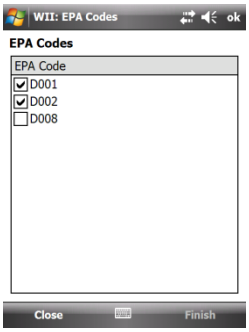
Note: The filter will display all work packages that contain a matching value to that which has been entered into the provided field.

9. From the list of matching work packages, select the desired package and click next to add the resulting cost code to the waste item.

Note: To remove an added cost code, select it from the list and click remove.

5.2.1.8 Entering EPA Codes

To enter EPA codes for a waste item, perform the following tasks:



1. Within the item review screen, select the additional tab at the bottom of the screen.
2. Within the additional tab, click the EPA codes hyperlink to enter the EPA codes screen.
3. In the list of applicable EPA Codes, check the desired codes/uncheck unwanted codes.

Note: If no codes are visible, there are no applicable codes for the selected waste stream.

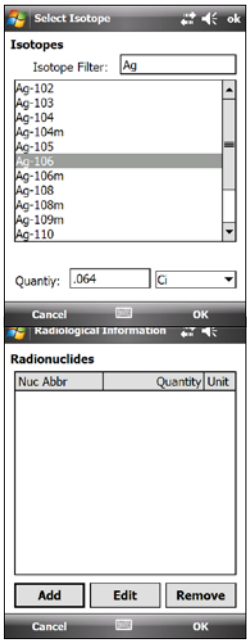
4. When the proper EPA codes have been selected, click close to return to the item review screen.

Note:

- To edit an added radionuclide, select it from the list and click edit.
- To remove an added radionuclide, select it from the list and click remove.

5.2.1.9 Entering Nuclide Information

To enter nuclide information for a waste item, perform the following tasks:

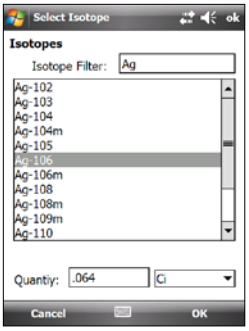


Note: For your convenience, if the selected waste stream contains radionuclide information, radionuclide information for the waste item will be automatically calculated based on the weight entered.

1. Within the item review screen, select the additional tab at the bottom of the screen.
2. Within the additional tab, click the Nuclides hyperlink to enter the radionuclides screen.
3. To add a radionuclide, click the add button to display the isotopes screen.
4. In the field provided, enter an isotope filter to populate a list of available isotopes matching the value entered.

Note: Two letters must be entered for a list to populate.

5. From the list of matching isotopes, select the desired isotope and enter a quantity amount.
6. Once a quantity amount has been entered, select either grams (g) or curies (ci) as a unit of measure from the drop down list provided and click ok.



Note: If a quantity amount has not been entered correctly, an error appears stating that a properly formatted quantity must be entered to continue.

7. Repeat for addition radionuclides.

Note:

- To edit an added radionuclide, select it from the list and click edit.
- To remove an added radionuclide, select it from the list and click remove.

8. Once all radionuclides have been added to the radionuclides list, click close to return to the item review screen.

5.2.1.10 Entering Comments

To enter comments for a waste item, perform the following tasks:

1. Within the item review screen, select the additional tab at the bottom of the screen.
2. Within the additional tab, click the comments hyperlink to enter the item comments screen.

Note: Comments are listed in order as to when they were added to the waste item.

3. To add a new comment to the list, click the add button to display the comment text field.
4. Enter the desired text into the field provided and click ok to return to the item review screen.

Note: For your convenience, templates are provided and can be accessed by clicking the 'Add using template' button.

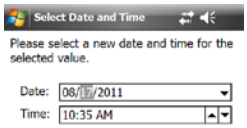
5. Once all comments have been entered, click close to return to the item review screen.

Note:

- To edit an added comment, select it from the list and click edit.
- To remove an added comment, select it from the list and click remove.

5.2.1.11 Selecting an Origin Date

To select an origin date for when the waste item was physically generated, perform the following tasks:



1. Within the item review screen, select the additional tab at the bottom of the screen.
2. Within the additional tab, click the origin hyperlink to enter the select date and time screen.
3. To alter the date, using the arrow, open the pop-out calendar and select the desired day.

Note:

- To move between calendar months, click on the left or right arrows provided.

- To select today's date, click on the bolded date below the calendar.
- The date can also be entered by typing in the desired digits.

4. Once a date has been selected, select a time by highlighting the digits and using the up and down arrows provided to set to the desired time.

Note: The time can also be entered by typing in the desired digits.

5. Once a time has been selected, click ok to return to the item review screen.

5.2.1.12 Selecting an Accumulation Start Date

To select an accumulation start date for when the waste item will enter the RCRA storage container, perform the following tasks:

Note: Accumulation start dates are only required for hazardous waste.

1. Within the item review screen, select the additional tab at the bottom of the screen.
2. Within the additional tab, click the accumulation start date hyperlink to enter the date and time screen.
3. To alter the date, using the arrow, open the pop-out calendar and select the desired day.

Note:

- To move between calendar months, click on the left or right arrows provided.
- To select today's date, click on the bolded date below the calendar.
- The date can also be entered by typing in the desired digits.

4. Once a date has been selected, select a time by highlighting the digits and using the up and down arrows provided to set to the desired time.

Note: The time can also be entered by typing in the desired digits.

5. Once a time has been selected, click ok to return to the item review screen.
6. Once all information has been properly entered for the waste item, click finish to display the pending items screen.

Note: Notice, the previously created waste item is now pending and can be edited directly on this screen until the mobile device has been synchronized with WCATS.

5.2.1.13 Printing the Barcode

Once the waste item has been properly identified, the user then has the ability to print a barcode from the mobile printer. To print a barcode, perform the following tasks:

1. Within the print barcode screen, select number of copies desired using the plus and minus buttons provided.
2. With the mobile device scanner pointing towards the mobile printer,

Note: For your convenience, you can check the following:

- Auto Start Print: In the future, it automatically sends barcodes to print once an item has been created.
- Close when finished: In the future, it automatically closes the print barcode screen once the barcode has been printed.

5.2.2 Container Verification

Users of the system can request field verification of containers and their properties. Requests for verification are tracked in the system along with the reason for the verification request and once verification is performed a user marks the request as complete.

5.2.2.1 Using Container Verification

Container verification is found in each container profile. Select Options > Verification. Contact Waste Help for more information.

5.2.2.2 Container Verification Report

A Container Verification report is built in to WCATS. Contact Waste Help for more information.

5.3 Generating and Managing TRU Waste

5.3.1 Mobile TRU Visual Inspection (VI)

The following section describes the process for creating and characterizing a transuranic (TRU) waste item.

5.3.1.1 Create a new TRU drum preparation task

To create a new TRU VI task, perform the following tasks:

1. Within the WCATS mobile device task selection screen, select TRU Visual Inspection and click continue.
2. Within the pending VI tasks screen, select the appropriate facility and service unit by clicking the hyperlink provided.

   Note: For your convenience, the last used location will automatically be selected.
3. Within the select facility screen, select a proper company from the drop down list provided.
4. From the list provided, select an available facility.

   Note: Available facilities are determined by company selection in the prior step.
5. Once a location has been selected, click ok to return to the pending tasks screen and click new task to create the task in the selected facility.

   Note: If pending tasks are available, the device prompts you to verify that you would like to continue. Click yes to continue and no to return to view the pending tasks.

5.3.1.2 Add an item to the task

1. Within the newly created task, click new item to enter the *'Step 1 of 7'* screen.
2. Using the mobile device scanner provided, scan the contact's badge to enter the necessary information.

   Note: Contact information can also be entered by clicking on the blue hyperlink provided and searching for the person via the search fields provided.
3. Using the drop down lists provided, select the generation facility and room.
4. From the scrollable list provided, select the desired waste stream for your item.
5. From the drop down list provided, select the appropriate work path for the item and click next to continue.

   Note: Work path availability depends on waste stream selection.

5.3.1.3 Select cost codes

1. Within the *'Step 2 of 7'* screen, select the appropriate cost codes from the scrollable list provided by checking the related box.
2. Once all cost codes have been identified, click next to continue to the cost code breakdown screen.
3. Within the table of all the previously selected cost codes, select a single cost code and in the field provided, enter a percentage of cost to assign to the selected code.

Note:

- Notice, the total percentage is automatically calculated.
- To return all the percentages to even disbursement, click the auto calculate button provided.
- Total percentage must equal 100% to continu3.

4. Once all cost codes have been assigned the proper percentage, click ok to continue.

5.3.1.4 Select a discard matrix

1. Within the *'Step 3 of 7'* screen, select a discard matrix from the scrollable list provided.
2. Once the proper discard matrix has been selected, click next to continue.

5.3.1.5 Select a container type and additional layers

3. Within the *'Step 4 of 7'* screen, select the appropriate container type using the drop down list provided.
4. To enter addition layers, click the add button.
5. From the layer types provided, select the desired layer and click ok.

Note: Notice, if the container type is a payload container, it also appears as an additional layer.

6. Layer status (i.e. active, breached, or removed) can be identified by selecting the desired layer and selecting the appropriate status via the options button.

Note: Status is shown by a b (breached) or R (removed) accompanying the order number.

7. Layer order can also be altered by selecting the desired layer and selecting move up or move down via the options button.
8. Once all layers have been properly identified, click next to continue.

5.3.1.6 Enter weight and volume

1. Within the *'Step 5 of 7'* screen, enter a gross weight and tare weight for the item in the field provided.

Note:

- To enter numbers via a numeric keypad, click the hyperlinks provided.

- Notice, the waste weight is automatically calculated from the gross and tare weights entered.

2. In the field provided, enter a container volume for the item.

Note:

- To enter numbers via a numeric keypad, click the hyperlink provided.
- Notice, the waste volume is automatically calculated from the calculated waste weight.

3. From the drop down lists provided, select the appropriate units of measure for the weight and volume amounts entered.

5.3.1.7 Add a waste material parameters (WMP)

1. Within the step 5 of 7 screen, click the add button to view the select WMP screen.
2. From the scrollable list provided, select the desired WMP.

Note: Notice, upon selection, a description is displayed below. The description can be modified by clicking in the text field provided.

3. If the weight percentage is not 100%, enter the correct weight % for the selected WMP in the field provided.
4. Click ok to add the WMP to the item.
5. Repeat steps 1-4 for all additional WMPs.

Note: To edit or delete a WMP, select the desired WMP and click edit/delete.

6. Once all WMPs have been properly documented, click next to continue.

5.3.1.8 Document prohibited items

1. Within the *'Step 6 of 7'* screen, select all appropriate prohibited items from the scrollable list provided by checking the related box.
2. If no prohibited items are present, click the *'None Present'* button.
3. Once all prohibited items have been documented, click next to continue.

5.3.1.9 Document Nuclear Material Types

1. Within the *'Step 7 of 7'* screen, select all appropriate nuclear material types from the scrollable list provided by checking the related box.

Note: To restrict nuclear material types, check the related box below the table.

Once all Nuclear Material types have been documented, click next to continue.

5.3.1.10 Review and Comment

1. Once all information has been properly entered into the mobile application, click next to view the VI review screen.
2. Using the tabs provided, review all entered information.

Note:

- If any of the information is incorrect, simply click on the associated hyperlink to modify.
- For your convenience, the contact and origin date are automatically documented upon creation of the task as the logged in user and task creation date.
- If you wish to print the barcode upon completion of this task, check the related box within the review screen.

3. Upon review, if you wish to enter comments pertaining to the task, you can do so by clicking on the hyperlink provided.
4. Within the comments screen, click add to enter the add comments screen.
5. In the field provided enter your comment and click ok to return to the comments screen.

Note: To edit or delete a comment, select the desired comment and click edit/delete.

6. Once all comments have been entered, click close to return to the review screen.
7. Once you have thoroughly reviewed the task, click finish to return to the task screen.

5.3.1.11 Sign off

1. Within the task screen, click sign off to execute the task via the task options button.
2. Within the task signatures screen, select the appropriate signature and review the signature terms provided.
3. Once reviewed, using the mobile scanner provided, scan your badge to electronically sign off on the task.
4. Repeat steps 2-3 for any remaining signature.
5. Verify the correct date and time for execution and click ok.

Note: To modify the date and time click the change date/time button and using either the drop down calendar provided for the date field or the up and down arrows provided in the time field, selected the desired date/time.

6. Review the signature results and click close to complete the task.

Note:

- If the signature did not pass execution, review the result details and contact Waste Help at wastehelp@lanl.gov or 5-2494.
- To revoke any of the executed signatures, select the desired signature and click revoke.
- Remember to synch your mobile device to record the task within the WCATS main application.

5.3.1.12 Reworking Items on the Mobile Device

Select Options > Edit Existing to edit an item or container that has already been entered into the system.

5.3.2 Performing Visual Inspection for TRU Waste Using the Desktop Application

Usually, operators perform visual inspection (VI) using the mobile devices, but VI can also be performed on the desktop application, afterwards. If you need to use the desktop application to enter VI into WCATS, you will need to have accurate notes of the actual VI you performed. The following steps show you how to use the desktop application to perform VI. (For instructions on using the mobile device to perform VI, see section 4.6, Performing Visual Inspection on the Mobile Device.)

In WCATS, container is a generic term that stands for any individual waste item or container of waste that has been identified in the system and assigned an identification number. Waste item is also used generically in WCATS, and can refer to either an individual waste item or to a container of waste. Essentially, waste item and container are interchangeable terms in WCATS.

1. Log in to the WCATS desktop application. The main WCATS screen opens.
2. Go to the File menu and select New > Container. The Create Container Profile screen opens.
3. Choose the company, facility, and process unit for the waste item from drop-down lists.
    a. Click the down arrow in the Company field and select the appropriate company.
    b. Click the down arrow in the Facility field and select the facility.
    c. Click the down arrow in the Process Unit field and select the process unit.
    d. Select the work path. After you select a work path, the Discard Matrix Code field is opened (if needed for that work path).
    e. Select the discard matrix code from the drop-down list.

Note: The discard matrix governs the labeled ID assigned by WCATS, determining the first letters of the ID. The labeled ID can be changed later, if necessary, but if it is changed, the discard matrix may have to be changed, as well.

    f. Click the save icon in the upper right corner of the Create Container Profile screen. The Container Creation Successful dialog box pops up with the message that the container was successfully created.
    g. Click the OK button. The dialog box closes, and the Container Profile screen opens with the General Information panel pre-selected, showing the container ID number assigned by WCATS in the title bar (blue) and in the Container ID field.

Note: When the Container Profile screen opens, your new container's ID is shown in the Container ID field. Write down the number for later reference. One way to find a container in WCATS is to search by Container ID number. You can also find containers by looking at your recent containers drop-down list. To view this list, click Recent in the menu bar of the WCATS main screen, and then select Containers. The path is Recent > Containers. This list shows containers from the last five business days only.

Another way to find containers is to use the Container Navigator, which you access by clicking the Container icon on the main button bar. The Container Navigator can find containers by current location, pending task in a work path, and the combination of company/facility/service unit/waste stream.

Note: The container name assigned by WCATS is created by combining the short form of the AK/waste stream profile name with the system ID.

4. Create a new mini-task.

Note: To perform VI on the container, you need to create a process task for VI.

   a. Click the Display button in the lower right corner of the screen (on the same line as the Container Mini-Task Controller: [VI]). The mini-task area opens below.

Note: The mini-task controller opens a task within the Container Profile, allowing the user to quickly accomplish a task related to that profile. This prevents the user from having to exit the container, create a new task, and define that task by selecting the same container, which would be several extra steps. Instead, to perform VI on the container, the user just opens a mini-task.

   b. Click Task Options and select Create Task from the drop-down. The right side of the table shows the new task, along with the date and its status (pending).

   c. Click the Edit Task button to the right. The Container Profile screen above the mini-task area changes so that it can be edited.

Note: Once you have created a new task in the mini-task controller and selected Edit Task, the Container Profile screen changes, showing some fields white (editable) along with some new options in the left navigation panel. The navigation options that can be edited (or changed) have a double chevron: >> in front of them.

In the case of the container mini-task, the options are Waste Material Parameters, Layers of Confinement, Radioassay, and Chemical Analysis, all activities that are performed in visual inspection.

5. Select material parameters.

   a. Click Waste Material Parameters. The Available Waste Material Parameters field opens in the panel on the right.

   b. Highlight the material parameter you want and click the Add button. The material parameter is moved down to the Selected Waste Material Parameters field below.

   c. Add more materials, as needed.

   d. Click in the 'Qnty Unit' field to change the unit of measure, if needed. The field's drop-down list allows you to select a unit.

   e. Click the 'Quantity' field and type in the appropriate amount. If you are using the weight percentage partition method, the percentages must total 100%.

6. Add layers of confinement.

a. Click Layers of Confinement in the left navigation panel. The Available Layers of Confinement field opens to the right.

b. Highlight the layer you want and click the Add button. The layer is moved down to the Selected Layers of Confinement field below.

Note: You can add more than one layer of confinement, but you can add only one at a time. You can also reorder them. WCATS orders layers in the order in which they are added, assigning a 1 to the first added, and so on.

The Options button allows you to remove a layer, or to mark it as breached. Once you've marked a layer as breached, it cannot be undone, except by either clicking the undo changes icon or using the Options button to remove the breached layer from the container.

c. If you need to add another layer, repeat step b.

Note: To reorder the layers, highlight the layer you want to move, and then click an arrow key to the right.

d. If you need to mark a layer as breached, click the Options button, and select Breach from the pull-down list. The layer's status changes from A to B in the Status column.

e. If you need to remove a layer from this container then click the Option button and select Remove >> Delete from Container. That layer is removed from the list.

f. If you need to show that a layer was physically removed, then click the Option button and select Remove >> Physical Removal. The system keeps it on the list but changes that layer's status to R.

g. Save your work by clicking the save icon.

Note: If you do not save before attempting to add a radioassay, WCATS will prevent you from adding one, and respond with an error message that you have to save before you can create a radioassay.

7. Add a radioassay.

a. Select Radioassay from the left navigation panel. The Radiological Assays panel opens to the right.

b. Click the Add button. WCATS adds an assay in the first row of the assay table.

c. Click the Edit button. The Generator Estimate Editor screen opens.

d. Click the Add button under Nuclear Material Types. The Nuclear Material Type Editor screen opens.

e. Select a material type from the Nuclear Material Type drop-down list.

i. Select a Measurement Code.

ii. Type in the quantity in grams.

iii. Type in the uncertainty.

iv. Click the OK button. The Nuclear Material Type Editor closes, and the Radioassay Isotopes table is populated with information for that material type.

f. If you need to make changes to the material type or to the information in the Radioassay Isotopes table, click the Detail button under the table.

g. If you need to make comments about the radioassay, click the Comments button. The Comments screen opens and allows you to add a comment.

h. If you are satisfied with the information, click the Close button. The Generator Estimate Editor closes, and the Radiological Assay panel is populated with information from the assay.

i. Click the Approve button to finalize the assay.

j. Save your work by clicking the save icon.

Note: If you do not save before attempting to add a chemical analysis, WCATS will prevent you from adding one, and respond with an error message reminding you to save before you can create a chemical analysis.

8. Select a chemical analysis, if needed.

   a. Select Chemical Analysis from the left navigation panel. The Analytical Samples Panel opens to the right.

   b. Click the Add button. The Chemical Analysis screen opens.

   c. Click the Add button. The Analyte Editor screen opens.

   d. Click the Chem. Name field's drop-down arrow. The drop-down list appears.

   e. Select the chemical name you want to analyze for. The Analyte Name field automatically populates.

   f. Type in the result and detection limit.

   g. Click the OK button. The Analyte Editor screen closes.

   h. If you need to make changes to the analysis selected, you can click the Detail button; otherwise, click the Close button. The Chemical Analysis screen closes.

   i. Click the Save icon. The system saves the chemical analysis information.

9. Print the barcode label for the container.

   a. Click the barcode icon. The Printer Preference dialog box opens.

   b. Choose a printer by highlighting one that has a green icon, and then click the Print button. The Printer Preference dialog box closes, and the label prints.

Note: Printers with green icons are available for printing, while those without green icons are not ready or available to print. They may be off line or have problems.

5.3.3 Mobile Drum Preparation

5.3.3.1 Create a new TRU drum preparation task

To create a new TRU Drum Preparation task, perform the following tasks:

1. Within the WCATS mobile device task selection screen, select TRU Drum Preparation and click continue.
2. Within the pending drum prep tasks screen, select the appropriate facility and service unit by clicking the hyperlink provided.

   Note: For your convenience, the last used location will automatically be selected.
3. Within the select facility screen, select a proper company from the drop down list provided.
4. From the list provided, select an available facility.

   Note: Available facilities are determined by company selection in the prior step.
5. Once a location has been selected, click ok to return to the pending tasks screen and click new task to create the task in the selected facility.

   Note: If pending tasks are available, the device prompts you to verify that you would like to continue. Click yes to continue and no to return to view the pending tasks.

5.3.3.2 Add a drum to the task

6. Within the newly created task, click new drum to enter the drum information screen.
7. Using the mobile device scanner provided, scan the drum ID label to enter the necessary information.
8. Using the drop down lists provided, select the facility and room for the selected drum.

   Note: Notice, the waste stream information is automatically provided based on the facility selected in previous steps.
9. From the drop down list provided, select the appropriate work path for the drum and click next.

5.3.3.3 Select a container type and additional layers

1. Within the *'Step 2 of 5'* screen, select the appropriate container type using the drop down list provided.
2. To enter addition layers, click the add button.
3. From the layer types provided, select the desired layer and click ok.

   Note: Notice, if the container type is a payload container, it also appears as an additional layer.
4. Layer status (i.e. active, breached, or removed) can be identified by selecting the desired layer and selecting the appropriate status via the options button.

   Note: Status is shown by a B (breached) or R (removed) accompanying the order number.
5. Layer order can also be altered by selecting the desired layer and selecting move up or move down via the options button.
6. Once all layers have been properly identified, click next to continue.

5.3.3.4 Enter Payload Information

1. Within the *'Step 3 of 5'* screen, select a PO number and year of manufacture for the drum using the drop down lists provided.
2. In the fields provided, enter a lot number and a serial number for the drum.

Note: If not applicable, simply check the N/A box provided.

5.3.3.5 Enter weight and volume

1. Within the *'Step 3 of 5'* screen, enter a tare weight and volume for the drum in the fields provided.

Note:

- To enter numbers via a numeric keypad, click the hyperlinks provided.
- The volume field may be disabled for editing depending on the container type previously selected.

2. From the drop down lists provided, select the appropriate units of measure and click next.

5.3.3.6 Add filters

1. Within the step 4 of 5 screen, click the add button to view the available filters table.
2. From the table provided, select the desired filter.
3. In the field provided, enter a serial number for the selected filter.
4. Using the drop down lists provided, select a manufacture date (month and year) for the filter selected.
5. In the field provided, enter a torque value in foot-pounds (ft. lbs) for the selected filter and click ok.

Note: To enter numbers via a numeric keypad, click the hyperlinks provided.

6. Repeat steps 1-5 for all additional filters.

Note: To edit or delete a filter, select the desired filter and click edit/delete.

7. Once all filters have been properly documented, click next to continue.

5.3.3.7 Add shielding and packing materials

1. Within the step 5 of 5 screen, click the add button to view the available packing materials table.
2. From the table provided, select the desired material.
3. In the fields provided, enter a material weight and thickness for the selected material.
4. Using the drop down list provided, select the appropriate unit of measure for the material weight and click ok.
5. Repeat steps 1-4 for all additional materials.

Note: To edit or delete a material, select the desired material and click edit/delete.

6. Once all packaging materials have been properly documented, click next to continue.

5.3.3.8 Review and Comment

1. Once all information has been properly entered into the mobile application, click next to view the Drum Prep review screen.
2. Using the tabs provided, review all entered information.

Note:

- If any of the information is incorrect, simply click on the associated hyperlink to modify.
- For your convenience, the contact and origin date are automatically documented upon creation of the task as the logged in user and task creation date.

3. Upon review, if you wish to enter comments pertaining to the task, you can do so by clicking on the hyperlink provided.
4. Within the comments screen, click add to enter the add comments screen.
5. In the field provided enter your comment and click ok to return to the comments screen.

Note: To edit or delete a comment, select the desired comment and click edit/delete.

6. Once all comments have been entered, click close to return to the review screen.

5.3.3.9 Select equipment

1. Before executing the task, select the required equipment via the task options button.
2. In the task equipment screen, the required equipment types are shown. Select a type and click the select button to select the proper piece of equipment.
3. From the available equipment table provided, select the desired piece of equipment and click ok.
4. If the equipment selected is appropriate, the status of the equipment type will change from pending to complete.
5. For the remaining equipment types, select a piece of equipment in the same manner.
6. Click close when all types are complete.

5.3.3.10 Sign off

1. Within the task screen, click sign off to execute the task via the task options button.
2. Within the task signatures screen, review the signature terms provided.
3. Once reviewed, using the mobile scanner provided, scan your badge to electronically sign off on the task.
4. Verify the correct date and time for execution and click ok.

Note: To modify the date and time click the change date/time button and using either the drop down calendar provided for the date field or the up and down arrows provided in the time field, selected the desired date/time.

5. Review the signature results and click close to complete the task.

Note:

- If the signature did not pass execution, review the result details and contact Waste Help at wastehelp@lanl.gov or 5-2494.
- To revoke any of the executed signatures, select the desired signature and click revoke.
- Remember to synch your mobile device to record the task within the WCATS main application.

5.3.4 Entering Chemical and Radiological Assay

A radioassay is a nondestructive procedure performed at the waste item and container level. The results are used to calculate or evaluate a number of waste characteristics, including fissile material quantities, TRU alpha activity concentrations, Pu-239 equivalent activity, U.S. DOT proper shipping name, and compliance with SNM discard or termination limits. This chapter discusses how to perform radioassays and record radiochemistry results in WCATS.

5.3.4.1 Performing Radioassays

The following section describes how to find a container and add a radioassay for it in WCATS.

1. Log in to the WCATS desktop application. The main WCATS screen opens.
2. Go to the File menu and select Find > Container > By Labeled ID. The Input dialog box opens.
3. Type in part of the labeled ID and click the OK button. The Container Navigator screen opens, showing a list of containers matching your search information.
4. Select the container you want and double-click in that row. The Container Profile screen opens for that container.
5. Close the Container Navigator screen, and then click the lock icon in the button bar of the Container Profile screen to unlock the profile for editing. The Input Request Dialog box opens.
6. Type in your reason for unlocking the profile (such as to add an NDA assay), then click the OK button. The Input Request Dialog box closes, and the profile is now unlocked.

Note: Some assays in the system are work path-controlled, so only assays required by the work path selected for that container will be available. If you need to perform an assay that is not available, the work path may need to be changed. Ask the waste technician to change the work path if you do not have authorization to do so in WCATS.

7. Create a mini-task for assay. If the assay is not work path-controlled, this step will be skipped.
    a. Click the Display button in the lower right corner of the Container Profile screen. The Container Mini-Task Controller area drops down.
    b. Click the Task Options button and select Create Task from the drop-down list. The left table in the Mini-Task Controller area shows a new pending assay task.

c. Select Radioassay in the left navigation panel. The Radioassay area opens to the right.

d. Highlight the assay task, then click the Task Options button and select Create Task. The right table populates with a new assay task.

e. Click Edit Task. The buttons under Radiological Assays become active.

Note: If the buttons under Radiological Assays are already active (white) and the Edit Task button is grayed out, then you do not need to click the Edit Task button.

f. Click the Save icon to save your changes.

Note: If you do not save before attempting to add a radioassay, WCATS will prevent you from adding one, and respond with an error message that you have to save before you can create a radioassay.

8. Add the new assay.

Note: The steps below assume that the radioassay will be entered with Nuclear Material Type data. Information can also be provided by radioisotope.

a. If the information is to be entered by hand, click the 'Add' button. The new assay populates in the Radiological Assays table. If the information is available in a flat file that can be uploaded, select the 'Add (File)' button and skip to step 9.

b. Make sure the new assay is highlighted, and then click the Edit button. The Assay Editor screen opens.

c. Click the Add button under Nuclear Material Types. The Nuclear Material Type Editor dialog box opens.

d. Enter information in the Nuclear Material Type Editor dialog box.

i. Pull down the Nuclear Material Type field and select the material type.

ii. Select the appropriate measurement code.

iii. Enter the quantity in grams.

iv. Enter the uncertainty amount in grams.

v. Click the OK button. The Nuclear Material Type Editor dialog box closes, and the Assay Editor populates with the material type and associated isotope information.

vi. Click the Close button. The Assay Editor screen closes.

Note: Although there is an Approve button next to the Edit and Add buttons, it is grayed out. You do not need to click the Approve button. The assay will be automatically approved when you sign off on the mini-task.

e. Click the Edit Task button to take the mini-task out of editing mode.

9. Sign off on the task.

a. Click the Task Options button and select Sign Off. The Task Signatures dialog box opens.

b. Click the Approve button. The Date/Time Selection dialog box opens.

c. Use the pull-down arrow to select the date and time you want, then click the OK button. The Date/Time Selection dialog box closes and the Task Signature Authorization dialog box opens.

d. Type in a comment as needed, then click the Approve button. The Task Signature Authorization dialog box closes and the Signature Results dialog box opens with the approval result.

e. If the signature failed, look at the results dialog box line by line for all actions that have "FAILED" after them. Those items need to be corrected.

   i. Click the OK button to close the Signature Results dialog box.

   ii. Unlock the profile for editing by clicking the Lock icon.

   iii. Select the panel that you need to correct, and make the change.

   iv. Repeat steps a–d.

f. Click the OK button. The Signature Results dialog box closes, revealing the Task Signatures dialog box.

Note: If two signatures are required for the radioassays, you will need to get a second person authorized to approve radioassays to sign off on the container. Once that approval has passed, the container's radioassay is completed in WCATS, and the mini-task status changes from pending to executed.

g. Click the Close button. The Task Signatures dialog box closes, and the radioassay mini-task icon shows green for approved (executed).

10. Click the lock icon. The profile is locked, and the Lock icon changes to a red, closed lock.
11. Click the exit button to close the Container Profile screen. The assays have been added, saved, and approved with signature.
12. Request the second signer to approve the task, if needed.

Note: If you need to edit a mini-task that has been signed off on, that signature must be revoked before the task can be edited.

5.3.4.2 Performing Confirmation Assays

After a container is sealed, a confirmation assay must be performed to verify there is no change in contents and the container is not contaminated or leaking. The following steps give detailed instructions on how to use WCATS to record the confirmation assay.

1. Log in to WCATS. The application's main screen opens.
2. Go to File > Find > Container > By Container ID **or** By Labeled ID. The Container Navigator opens with container records matching your search.
3. Double-click the row of the record you want. The container profile opens.
4. Create a mini-task.

   a. Select Pending Tasks from the navigation panel. The Pending Tasks panel opens.

b. Select the CASSAY task, marked with a yellow icon (pending).

c. Select Radioassay from the navigation panel. The Radioassay panel opens.

d. Click the Display button to show the mini-task area. The Container Mini-Task Controller area opens.

e. Click the Task Options button and select Create Task. A CASSAY task is created and populated in the Task table to the left of the Task Options button.

f. Click the Task Options button and select Open Task.

g. Click the Edit Task button. The task is now open for editing.

5. Add the assay.

   a. Click the Add button. A pending confirmation assay appears in the Radiological Assays table.

   b. Click the Edit button to edit the new assay. The Confirmation Assay Editor opens.

   c. Click the Detail button. The Nuclear Material Type Editor opens.

   d. Enter the appropriate information in all the fields, and then click the OK button. The Nuclear Material Type Editor closes.

   e. Close the Confirmation Assay Editor by clicking the Close button. The container profile is visible again.

6. Close the mini-task by clicking the Edit Task button. The mini-task is closed.

7. Sign off on the assay.

   a. Click the Task Options button and select Sign Off. The Task Signatures dialog box opens.

   b. Click the Approve button. The Date/Time Selection dialog box opens.

   c. Verify the date and time and click the OK button. The box closes, and the Task Signature Authorization dialog box opens.

   d. Type any comments and click the Approve button. The Signature Result dialog box opens with the result, Passed or Failed.

   e. Click the OK button. The box closes, revealing the Task Signatures dialog box.

   f. Close the Task Signatures dialog box by clicking the Close button. The box closes. The profile screen now shows the task as executed (green icon).

5.3.5 Reclassifying TRU Waste as LLW

Once it has been determined that a waste container/item is not TRU or if the waste stream and work path needs to be corrected, the following steps are used:

1. Open up the container profile.
2. Containers with TRU and /or AK Waste streams:
   a. Unlock the container profile.

b. Click on Options-Reclassify (for AK waste stream only);
c. Change the waste stream and work path for that container to the appropriate waste stream. This waste stream may be LLW, MLLW, or another similar waste stream.
d. The container can now be managed as normal.

6 Treating and Processing Waste

Packaging and processing waste includes any process tasks that change the contents, composition, or form of the waste being prepared for disposal. The types of operations include cementation, packaging, sizing, compaction, or any operation that changes the chemical or physical composition of the waste. WCATS allows users to document waste processing tasks for their operation, including identifying process input and output containers, and partitioning of nuclear material and/or hazardous constituents from the input to output containers.

6.1 Waste Processing Concepts

Processing tasks change the contents and/or physical and chemical properties of waste containers. Some examples include the following:

- Waste Consolidation
- Container Over-packing
- Repackaging Operations
- Waste Compaction
- Macro-encapsulation
- Incineration

6.1.1 Partitioning of Radionuclides, EPA Codes, and UHCs

WCATS processing tasks automatically support the partitioning of radionuclides, EPA Codes, UHCs, and Accumulation Start Dates. Radionuclides are partitioned based on the partition methods described in the next section.

6.1.2 Radionuclide Partition Methods

As waste is processed from an input container into output containers the radionuclides must be accounted for between the input and output containers. As processing operations are performed the system automatically partitions radionuclides from an input container, decommissions the input container, and applies a partitioned radioassay to each output container. The total of the radioassays on the output containers should match the values on the input container. To support different types of processing operations, several methods for partitioning the radionuclides are available in the system. The selection of the appropriate method can be either strictly enforced by the application at the service unit level, or users may be allowed to choose them on a per-task basis.

WCATS supports four types of processing and partition methods for radionuclides:

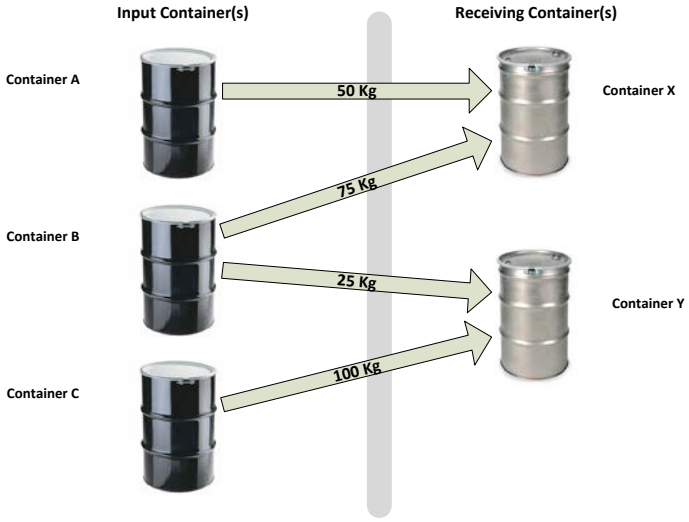
Type of Processing (Partition Method)	Typical Usage
Item-based	Consolidation, Over-packing Operations
Weight-based	Segregation, Sizing, Sorting, Repackaging Operations
Volume-based	Liquid Waste Processing, Tank System Transfers
Percent-based	Solid Waste Operations Where Measurements Accuracy is not Important

6.1.2.1 Item-based Processing

Item-based Processing is the most common type of processing. It is the default operation in WCATS for both TRU and Non-TRU operations. In WCATS multiple levels of packaging are supported. For example, a bag can be packaged into a drum that is subsequently packaged into a standard waste box (SWB).

6.1.2.2 Weight-based Processing

With weight-based processing, the end user measures and records the weight of each transfer. Waste from one input can be divided and transferred into one or more receiving containers. In the end, radionuclides will be apportioned to the receiving containers according to the portion of the waste that was transferred into them.



In the example shown here, waste from Container A is transferred into Container X and waste from Container C is transferred into Container Y. Container B is divided between two separate containers.

6.1.2.3 Volume-based Processing

Volume-based processing can also divide waste between multiple containers, but is more commonly used for liquid waste processing. It is the default operation for use in Tank System Transfers in WCATS.

6.1.2.4 Percent-based Processing

Percent-based packaging is similar to weight and volume-based packaging operations, but less precision is required (percentages are usually estimated in this case). Similarly to weight-based processing, a container can be divided up into many receiving containers. The percent-based method creates new radioassays on each receiving container that reflect the percentage of the waste from the input container that was assigned to the daughter.

6.1.3 Holdup Containers

For information on holdup containers in WCATS, contact Waste Help.

6.2 Consolidating Waste

As containers are prepared for disposition they may be combined, separated, or otherwise processed into output containers. This section outlines several options for recording transactions to represent those container changes. In each case listed in this section a task is created to represent the transition from input containers to output containers. Once these tasks are completed the input containers become decommissioned in the system and are no longer part of the active inventory. Some simple transactions, such as the consolidation of several non-rad items into a larger container, can be performed using the mobile device while others require the desktop application.

6.2.1 Mobile Waste Item Consolidation

6.2.1.1 Adding Items to an Existing Container:

1. Synchronize the mobile device and log in to the WCATS application.
2. Select 'Consolidation/Packaging and click on 'Continue'.
3. Scan the container barcode of an existing container to move items into.
4. Verify information is correct for that container.
5. Select the 'Contents' tab. Contents should match the items already in this container.
6. Select 'Modify/Repackage', then 'Add Item'.
7. Scan the items' barcode to be added to this output/receiving container.
8. Select 'Add Item' to add another item

NOTE: You can add more items by scanning or entering in the Labeled ID. You can REMOVE items/containers scanned or entered. Both of these actions are for the same output container.

9. Verify that the items are added to the list then click 'Next'.
10. Set the location and weight/volume information for the new/existing container. As well as any other desired fields that has a blue link.
11. Select 'Print Barcode', select 'OK'.
12. Select 'Sign Off'.

13. Verify the date and time that the task occurred.
14. Verify that the signature(s) results have passed.
15. Click 'Finish'.
16. Print the container new label (History of the drums will reflect with a new container ID)
17. Synchronize the mobile device and verify that the task has executed without errors.

Note: The 'Task Profile Report' is available for this consolidation.

6.2.1.2 Consolidate Items with a newly created output Container: (plus Overpack Drum)

1. Synchronize the mobile device and log in to the WCATS application.
2. Select 'Consolidation/Packaging and click on 'Continue'.
3. Select "Consolidate Items'
4. Select the container type and volume for the output container.
5. Click 'Next'.
6. Scan the items'/container barcode to be added to the output container.
7. Verify that the items are added to the list.

Note: The Add and Remove buttons are there to add more items by entering in the container ID or Labeled ID but you can still add by scanning the barcode. You can REMOVE items/containers scanned or entered.

8. Click 'Next'.
9. Verify all information displayed on the 'Item Details' screen.
10. Modify the location and weight/volume information for the new container as well as any other desired fields that has a blue link if needed.
11. Click 'OK'.

Note: you can create another '+ Consolidate' process with different items and different output container; or create a '+ Repack' process for moving items out of one container into another container(s); or 'Edit' the consolidated/repackaged process just performed, all within the same task.

12. Select 'Sign Off'. Scan badge and verify task execution date and time. Click 'OK'.
13. Verify that the signature(s) results have passed. Click 'Finish'.
14. Print the container new label. (History of the drums will reflect with a new container ID)
15. Synchronize the mobile device and verify that the task has executed without errors.
16. The 'Task Profile Report' is available for this consolidation.

6.2.1.3 Transfer Items from one container into another container.

1. Synchronize the mobile device and log in to the WCATS application.
2. Select 'Consolidation/Packaging and click on 'Continue'.
3. Scan the container barcode of an existing container to move items out of.
4. Verify information on the 'Details' screen for this container is correct.

5. Select the 'Contents' tab. Contents should match the items already in this container.
6. Select 'Modify/Repackage',
7. Select the item to transfer, then click on 'Transfer Item'.
8. Scan the existing receiving container barcode or
    a. Click on 'Add' button to create a new container (follow steps 8b – 8c).
    b. Select the container type and volume for the output/receiving container.
    c. Select the new container ID, again, and click 'OK'.
9. If you need to transfer more items repeat steps 7-8.

Note: If the container has been emptied of all item(s) (transferred out) then that container will be decommissioned in the system.

All containers repackaged will receive new container IDs. That is any containers with item(s) coming out of container(s) and item (s) going into container(s), except decommissioned container(s).

10. If completed select 'Next'
11. Verify that the items are added to the list then click 'Next'.
12. Set the location and weight/volume information for the new/existing container. As well as any other desired fields that has a blue link.

Note: you can create another '+ Consolidate' process with different items and different output container; or create a '+ Repack' process for moving items out of one container into another container(s); or 'Edit' the consolidated/repackaged process just performed, all within the same task.

13. Select 'Sign Off'. Scan badge
14. Verify date and time that task occurred. Click 'OK'.
15. Verify that the signature(s) results have passed.
16. Click 'Finish'.
17. Print the container(s) new ID label(s). (History of the drums will reflect with a new container ID.)
18. Synchronize the mobile device and verify that the task has executed without errors.

Note: Repacking items will generate new containers numbers. For new containers with a dash number after it (XXXXXX-2) will be considered a new container and will not be tracked in the genealogy of the container that the items with no dash (XXXXXX). A container that has all of its items removed will be decommissioned and the items will be tracked with their new containers.

6.2.2 Desktop Consolidation Tasks

All types of consolidation tasks can be represented using the desktop application. While it is essential to capture some tasks in the field, certain tasks which are more complex may require the use of the desktop application and its dry-lab functionality as it can provide more accurate and insightful feedback of complex operations.

6.2.2.1 Item-based Consolidation

Consolidation units in WCATS default to item-based packaging. Use the following steps to perform a packaging task:

1. Sign in to the WCATS desktop application.
2. Click on FILE-NEW-TASK-Process
3. Under "Service Unit" enter the correct Company, Facility and Process Unit. (e.g. LANL; 46; and Consolidation or Repack)

   NOTE: Process Units of Repack are only available for TSDF complex process operations.
4. Click on the blue disk save icon in the upper right-hand corner to create the Process Task Profile.

   NOTE: Ensure that the facility and processing Unit is correct before clicking save. If incorrect and saved, you will need to cancel since the 'Service Unit' cannot be edited.
5. Click on the 'Input Items' panel.
6. Click the 'Add' button.
7. Select your items/containers from the "Add Input Container" screen, Search Type = 'Location/Time' and "Storage Unit" = where the items/containers are currently stored.

   NOTE: All input containers listed will need to be processed for the task to be executed.
8. Selecting drums can be by using the CTRL-click or simply click and drag you mouse over the list of containers. Click 'Add' button and verify that the correct drums are showing up under the "Task Input Containers".
9. Click on the "Output Containers" panel and click the 'Add' button.
10. Complete the information regarding the new output container: The building and room number of the service unit and grid location; the container type (e.g. DF, DM, CF); the container subtype (i.e. container volume); tare weight of the container itself; if not already populated; and the volume if not already populated.

    NOTE: Tare weight automatically populates when standard drum sizes have been selected.
11. Click on 'OK'.
12. Click on "Packaging" panel.
13. From the "Input Containers" on the left-hand side; drag the items/containers over to the new output container on the "Receiving Containers" right-hand side.
14. Dragging only one item/container at a time and drag to right onto the output container number.

    NOTE: All input containers will need to be processed (consolidated/repacked) for task to execute.

    Gauges are for Output containers only on processing tasks. Click on the 'Display' button to view gauges. Gauges can be set up within the application with assistance from the Waste Help team.
15. Click on the blue disk save icon.

NOTE: All containers will need a waste stream id. The system will assign that waste stream to the output container as follows:

- If the consolidated-input items had the same WS# then the output container will carry the same WS#.
- If the input items have different WS# from each other; then the output container will assign its system generated WS#.

The Waste Data Form will display all the WS#s for the input and output containers.

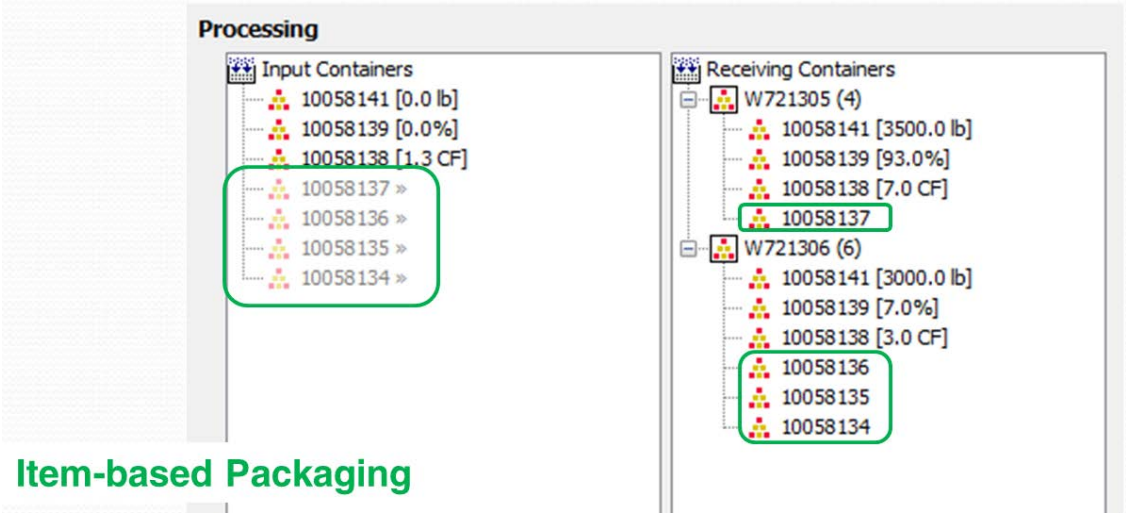
16. Click on 'Output Container' panel and click on the "Change WS" button if the WS# needs to be changed manually.

Note: Consolidation or repackage of items will receive a new container id. (This will change the existing container id/labeled Id – if all items have been removed from a container, that container will be decommissioned)

6.2.2.2 Weight, Volume, and Percent-based Packaging

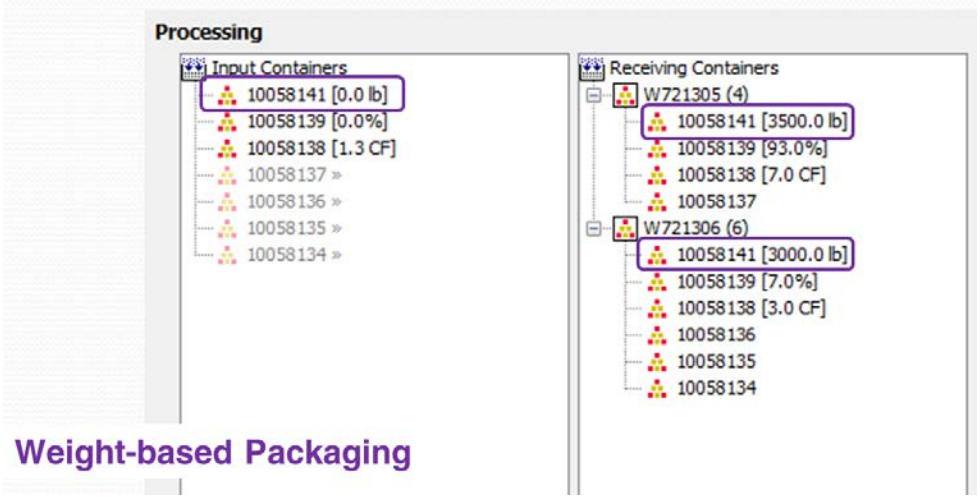
To change a container's partition method to weight, volume, or percent-based packaging, right click on that container while it is in the 'Input Containers' section of the *Packaging* panel. This will allow the container to be packaged according to a different partitioning method. Partition methods are described in section 6.1.2.

Containers which have item-based packaging are shown with a double right arrow (»).



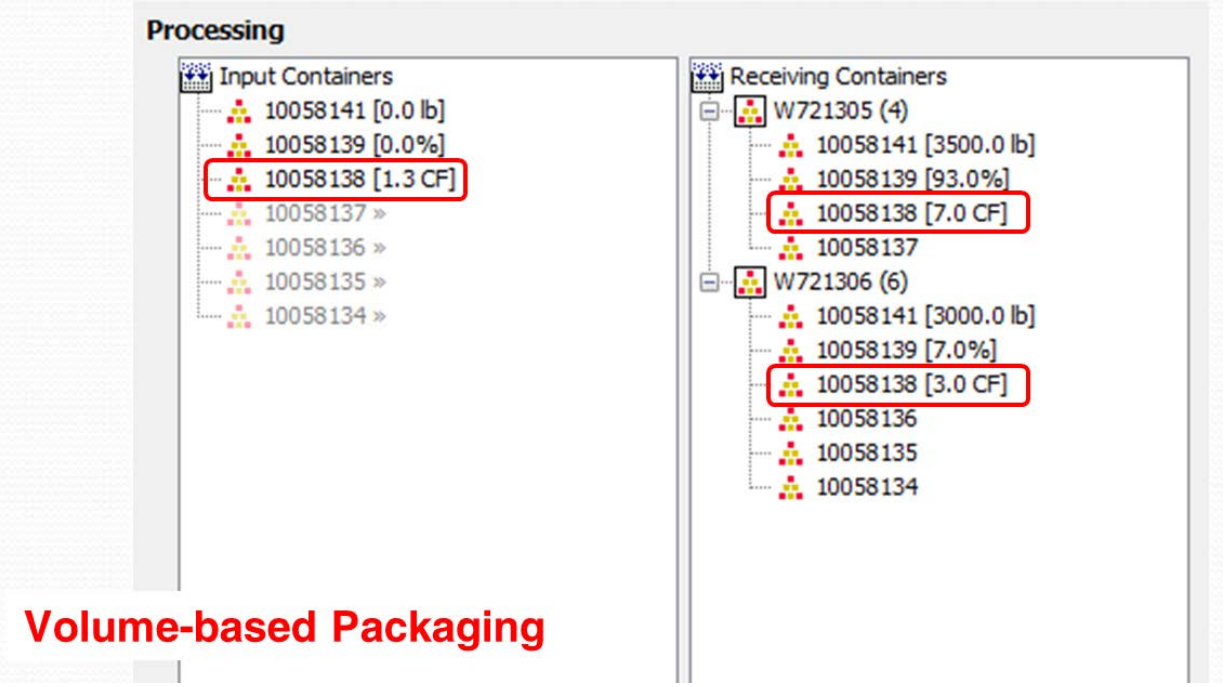
Item-based Packaging

Containers which are set to weight-based packaging display the weight in brackets, e.g. [1.0 lb].



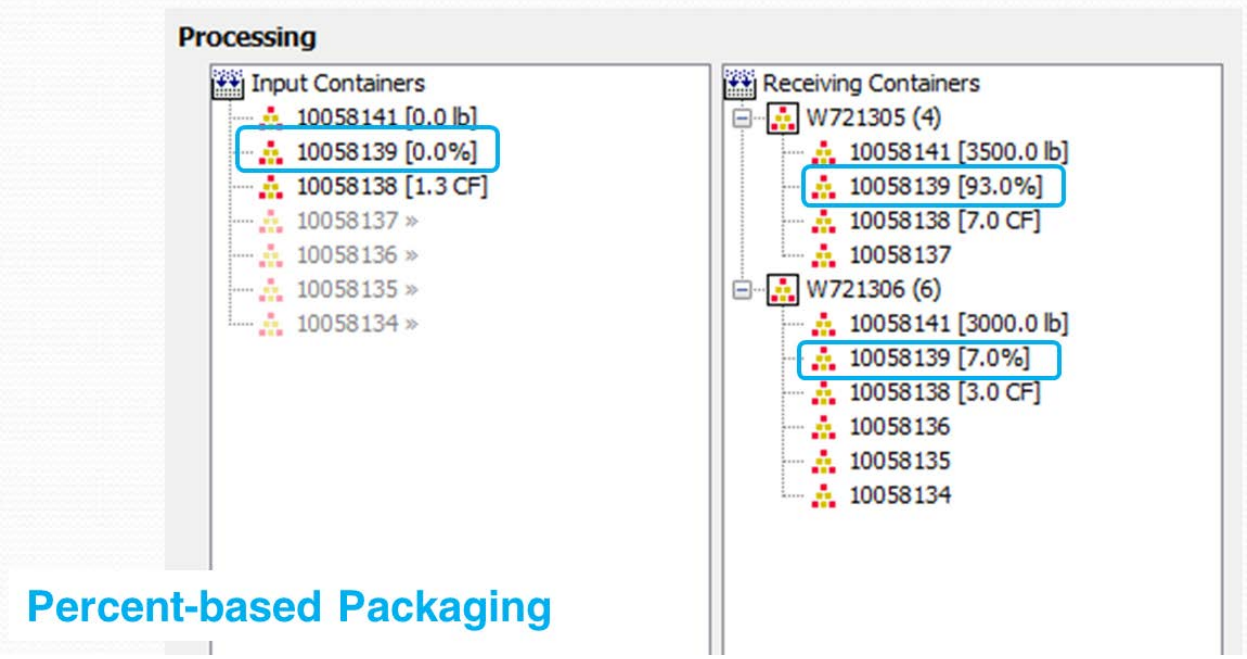
Weight-based Packaging

Containers which will use use volume-based packaging show the volume amount in brackets, e.g. [1.3 CF].



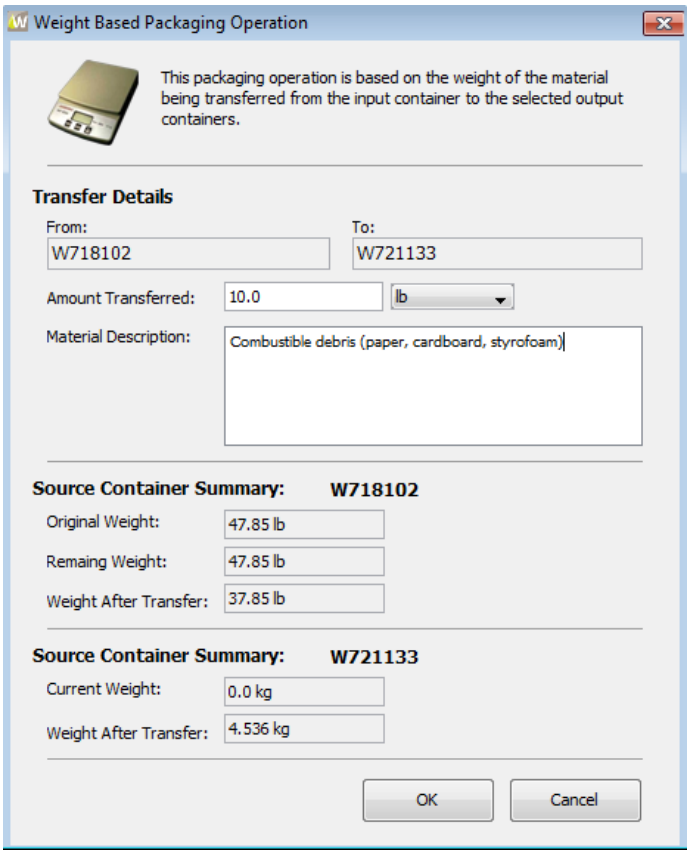
Volume-based Packaging

Containers that will use percent-based packaging show the percentages remaining on the input container side and the percentage transferred on the Receiving Containers side.



Percent-based Packaging

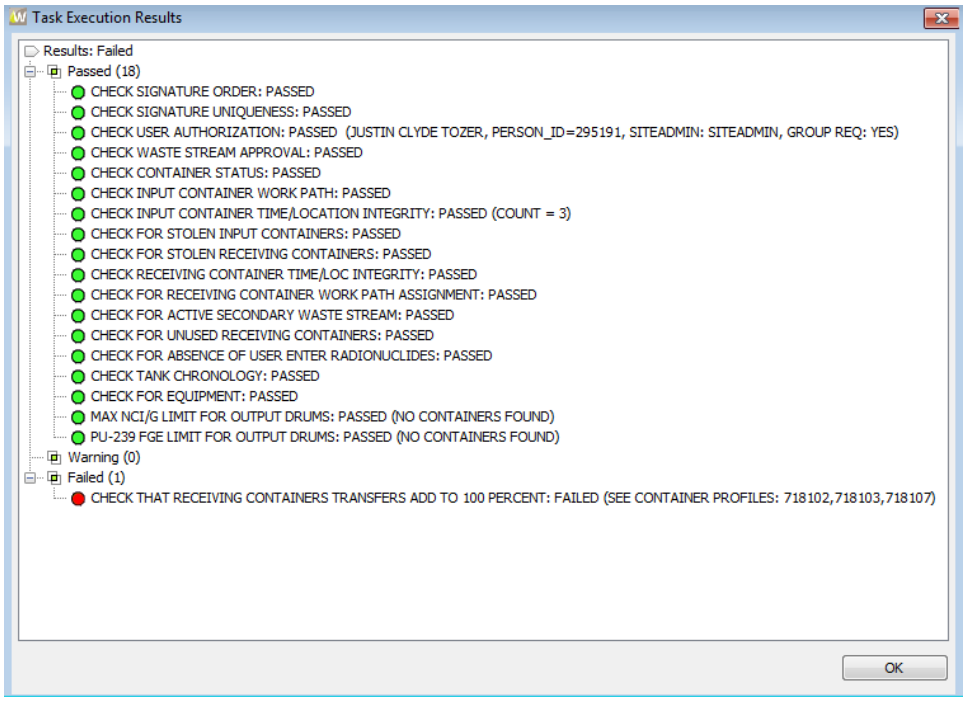
As waste is transferred into each container by dragging from the input side and dropping it on the receiving side, the amount to be transferred is captured using a pop-up screen (show below). If the drag-and-drop is repeated, the amount to be transferred is replaced with the new amount.



Pop-up screen for Weight-based Transfer

6.3 Understanding Task Failure Messages

After signing off on a task, a window will appear displaying the Task Execution Results. Each time a signature is given the system evaluates many rules to ensure that issues with the waste will not arise. The problems are shown as Passed, *Warning*, or *Failed*. The user should address the issues shown in both the *Warning* and *Failed* sections.



Task Execution Results

6.4 TRU Packaging

TRU and MTRU containers have additional functionality to support the capture of process-specific information. This information can be captured in tasks to support item-based packaging as well as in simple dialog-based recording of an overpacked container along with its information about layers of confinement.

6.4.1 Item-Based Packaging

The following steps give detailed instructions for packaging TRU and MTRU waste items using the WCATS desktop application.

1. Log in to the WCATS desktop application. The main WCATS screen opens.
2. Go to the File menu and select New > Task > Process. The Create Process Task Profile screen opens.
3. Choose the company, facility, and process unit for the waste item from drop-down lists.
    a. Click the down arrow in the Company field and select the appropriate company.
    b. Click the down arrow in the Facility field and select the facility.
    c. Click the down arrow in the Process Unit field and select the process unit.
    d. Click the Save icon in the upper right corner of the Create Process Task Profile screen. The Task Creation Successful dialog box pops up with the message that the task was successfully created.

Note: The Save icon appears in each WCATS screen, in the title bar just below the screen's menu bar (where File and Help appear). The Save icon becomes active (that is, looks colored instead of gray), whenever you make changes within a screen, or when a new task is created. In the case of the Create Process Task Profile screen, the Save icon is active when the screen opens.

    e. Click the OK button. The dialog box closes, and the Process Task Profile screen opens with the General Information panel pre-selected, showing the ID number assigned to your task by WCATS.

Note: When the Process Task Profile screen opens, your new task's ID is shown in the Task ID field. Write down the number for later reference. One way to find a task in WCATS is to search by Task ID number. You can also find tasks by looking at your recent tasks drop-down list. To view this list, click Recent in the menu bar of the WCATS main screen, and then select Tasks. This list shows all your tasks from the last five business days only.

Note: The task name assigned by WCATS is created by combining the short forms of the company name, facility name, and process unit, which is separated from the first part of the task name by a hyphen.

Note: The completion date and time are assigned by WCATS automatically. You can change this date as needed to reflect the actual time the item(s) were packaged.

4. Select input containers.

Note: The term input container is used to mean the waste item you want to package.

a. Click Input Containers in the left panel of the screen. The screen's display in the right-hand panel changes to show input containers.

b. Click the Add button (lower right). The Add Input Container dialog box opens.

c. Choose either Location/Time or Workpath from the Search Type field.

Note: You can use Location/Time or Workpath to search for containers to use as input containers. The difference is that containers listed under Workpath are truly ready, because they have been assigned to a work path, while those under Location/Time have been created in the system and are listed by location in a service unit, but may or may not be ready for use.

d. Choose a storage unit from the Storage Unit field's drop-down list.

e. If you chose to search by work path, make sure you choose the appropriate work path from the Storage Unit field. The Available Containers field populates with an active list of containers to choose from.

f. Select one or more containers you want to use.

Note: To select containers next to each other, click the first container you want, press the Shift key, and drag the mouse down to highlight additional containers. When you have selected the ones you want, release the mouse button and the Shift key.

Note: To select containers separated from each other in the list, select the first, press the Control key, and then mouse-click the others you want while holding down the Control key.

5. Once you have selected the input container(s), click the Add button. The Add Input Container dialog box closes, and the Process Task Profile screen shows the selected containers in the Input Container panel.

6. Select equipment to be used in packaging the waste, if needed.

a. Click Equipment Calibration in the left panel. In the right panel, the Calibrated Equipment field appears with the first piece of equipment in the list highlighted.

Note: If you do not need to use any equipment in packaging the waste, you may skip the steps dealing with equipment (6a–g).

b. With one of the equipment items highlighted, click the Select button. The Available Equipment dialog box opens with a list of equipment of that type.

c. Select one of the available pieces of equipment, and then click the OK button. The dialog box closes, and the equipment now shows a green icon next to it.

Note: If you select equipment that is expired or in need of calibration, or otherwise invalid in WCATS, there will be no error or warning message, but the red icon next to that equipment type will not change to green, and WCATS will not allow you to approve the task at the end of the packaging process.

d. IF the item's icon is still red
THEN choose that item and click the Select button then choose another of the available equipment that is listed as Active, with no limiting factors (like routine service required or an expiration date).

e. Click the OK button, and then verify that the equipment's icon is now green.

f. With the next piece of equipment selected, click the Select button. The Available Equipment dialog box opens with a list of equipment of that type.

g. Select the equipment from the list of equipment available, and then click the OK button. The dialog box closes, and the equipment has a green icon next to it.

7. Select one or more receiving containers.

   a. Click Receiving Containers in the left panel of the Process Task Profile screen. The Available Receiving Containers field is displayed in the right panel.

   b. Select an available container, and then click the Add button. The container is added to the Selected Receiving Containers field below.

Note: You can only select one receiving container at a time, but you can add as many as you need, as long as they are available. If you need more containers than are available, see section 4.7.1 above for instructions on creating containers.

   c. Click the Output Waste Stream arrow and select a waste stream from the list.

   d. Click the Output Workpath arrow and select a work path from the drop-down list.

   e. Repeat steps b–d for each container you need to add.

8. Click Checklist Review in the left panel of the Process Task Profile screen. The Checklist Review field is displayed in the right panel.

9. Click in the box under Response in the Checklist Review field. A drop-down list appears with the possible responses.

Note: The system is pre-set with the response that passes the system parameters for the checklist review. Only that response will change the red icon in the Status box to green. If the Status icon remains red, WCATS will not allow you to approve the task.

10. Select the response. The red icon in the Status box changes to green.

11. Click Holdup Containers in the left panel, if you need to add a container for holdup.

Note: Holdup containers are used to dispose of waste generated by the packaging process, such as a HEPA filter from a tool or a container. Usually, holdup containers are not needed.

12. Add holdup container(s).

   a. Highlight a container in the Available Holdup Containers field.

   b. Click the Add button. The container is moved to the Selected Holdup Containers field below.

   c. If you need to remove a container you added, highlight it and click the Remove button. The container is moved back up to the Available Holdup Containers field.

13. Click TRU Packaging in the left panel. The right panel displays the Packaging panel.

Note: The TRU Packaging panel is named Packaging if the selections for your task did not involve TRU waste. Only TRU waste items and work paths name the panel TRU Packaging.

The Packaging panel opens with the Input Containers tab already selected. Notice that Input Containers is also selected in the Packaging field above the tabs. Changes to the Packaging field will change which tab is selected below.

14. Package waste items.
    a. Verify that you have a weight recorded for each item before it was put in the container.
    b. Drag and drop a waste item you need to package from the Input Containers to a container on the Receiving Containers side. When the container ID turns dark, the waste item can be dropped. The display changes to show the waste item in that receiving container and the Item Transfer tab is now selected.

Note: If a waste item is a container holding waste, then those items are shown below the waste item ID. You can hide the waste items belonging to a waste item ID by clicking the minus sign next to the waste item ID: those items are hidden and the minus sign changes to a plus sign.

    c. In the Item Transfer tab, enter the weight recorded for that item. The default unit of measure is kg, but you can click the arrow to change the unit, if needed.

Note: Notice that the Measured Weight field is white. This indicates that the field is active, and can accept entries. The other fields are not white, and cannot be changed here.

15. Continue dragging and dropping waste items into the receiving container(s), repeating steps 14a–c for each item.

Note: The packaging task is now done. You can add comments to the comment log, if needed. The next step required is to sign (approve) the task.

16. Click the Save icon in the upper right corner of the Process Task Profile screen. WCATS saves the task, and turns the icon gray.
17. Click the Lock icon in the upper right corner of the Process Task Profile screen. WCATS locks the task, and changes the icon to a red, closed lock.
18. Click Signatures in the left panel of the Process Task Profile screen. The right panel displays the Signatures field.
19. Click the Sign button. The Task Signature Authorization dialog box opens.
20. Type in comments, if desired, and then click the Approve button. The dialog box closes, and the Signature Result screen opens, with the result in the title bar.
21. Click the OK button to accept the result. The Signature Result screen closes, and the Signatures field shows the signature just entered in the lower part of the field, and the icon showing yellow (pending status) has changed to green.
22. The task is completed and approved. Click the exit button in the upper right corner of the Process Task Profile screen to close this task.

6.4.2 Simple Overpacking

Simple overpacking provides an option for a single container to be put inside a larger container for overpack or doublepack depending on the layers of integrity for the container. This is allowed for TRU (including MTRU and other TRU waste type) containers only, and the remaining container receives a new label. For example, a 55-gallon drum can be packaged into an 85-gallon drum. No task is required for this change, but the update is made in WCATS in the following manner:

1. Open the container profile to be updated.
2. Select Options > Overpack container. A new dialog box will appear.
3. Set the new container type and subtype and add additional tare weight if necessary. Review and update weights, volumes, and layers of confinement.
4. If the new packaging configuration meets double-pack requirements, select the double-pack check box.
5. Select 'OK'. Review all container information on the panels shown and update as necessary.
6. Print a new container label from the profile's Options menu and apply it to the container.

6.5 Performing Tank System Transfers

Tank systems are used to accept liquid waste from various sources in order to store it, or to use in other waste handling processes, such as cementation. The WCATS desktop application can perform three types of tank system transfers:

- Input container to tank
- Tank to receiving container
- Tank to tank

All three types of transfers can be done using the tank transfer process unit, abbreviated as TTRANS. The following steps give detailed instructions for transferring liquid waste into or out of tanks using the WCATS desktop application.

1. Log in to the WCATS desktop application. The main WCATS screen opens.
2. Go to the File menu and select New > Task > Process. The Create Process Task Profile screen opens.
3. Choose the company, facility, and process unit for the waste item from drop-down lists.
    a. Click the arrow in the Company field and select the appropriate company.
    b. Click the down arrow in the Facility field and select the facility.
    c. Click the down arrow in the Process Unit field and select the tank transfer process unit, "TTRANS."

d. Click the Save icon in the upper right corner of the Create Process Task Profile screen. The Task Creation Successful dialog box pops up with the message that the task was successfully created.

e. Click the OK button. The Process Task Profile screen appears with your task ID number assigned.

4. Write down the task ID number for future reference. (If you need to stop this task and resume it later, you can find your task by the task ID number.)

5. Perform a transfer from an input container to a tank.

a. Select Input Containers from the left panel. The right panel displays the Task Input Containers area.

b. Click the Add button to choose an input container. The Add Input Container screen opens.

c. Select the container(s) you need, and then click the Add button. The Add Input Container screen closes, and the containers you selected are now in the Task Input Containers area.

d. Click Tank Transfer in the left panel. The right panel displays the Tank System area in the upper half of the panel, and the Transfers fields in the lower half.

e. Go to the Type field and select from the drop-down list "Input Container to Tank."

f. Go to the *'From'* field and select your input container. Since you already selected one on the Input Containers panel, the one you chose should be available.

g. Go to the 'To' field and select the tank you want to transfer to.

Note: You can also select your tank by clicking the numbered tank in the image above, under Tank System. When you click on a tank, that tank turns green to show it is selected, and the tank's number is automatically entered in the *'To'* field.

h. If you need to see input container information, click the Information button next to the *'From'* field. The Container Fissile Material screen opens.

Note: You can also click the Information button next to the *'To'* field to see the same types of information for that container.

i. Close the screen when you are ready by clicking the exit button.

j. Click into the Volume field and type in the volume amount.

k. Make sure that the Unit field next to it shows the appropriate unit of measure. If not, click the down arrow and select the correct unit.

l. Click the Transfer button. The system makes the transfer.

m. If you want to see the result of your transfer on the screen, check the Preview Transfers box. The tank system image changes to show the resultant levels and the table next to the fields under Transfers (in the lower half of this panel) now shows the information filled in.

n. If you need to cancel the transfer, click the Remove button. The system undoes the transfer you just made.

6. Perform a transfer from a tank to a receiving container.

   a. Select Receiving Containers from the left panel. The right panel displays the receiving container information, with available containers in the upper half of the panel and the selected containers in the lower half.

   b. Select a receiving container, and then click the Add button. The receiving container is moved to the Selected Receiving Containers area.

Note: You can also click the Remove button to move the container out of the Selected Receiving Containers area, back up to the Available Receiving Containers area. If needed, you can select more than one container, but you can only add one at a time.

   c. Select a waste stream from the Output Waste Stream field's drop-down list.

   d. Select a work path from the Output Workpath field's drop-down list.

   e. Click Tank Transfer in the left panel. The right panel displays the Tank System image in the upper half of the panel, and the Transfers fields in the lower half.

   f. Go to the Type field and select "Tank to Receiving Container" from the drop-down list.

   g. Go to the *'From'* field and select the tank you want to transfer from. You can also select your tank by clicking the tank in the numbered tank in the image above, under Tank System.

Note: When you select the type of transfer in the Type field, the *'from'* and *'to'* containers are automatically selected, depending on the type of transfer chosen. You can change any of these selections as needed.

   h. Go to the *'to'* field and verify that the correct receiving container is selected.

   i. Click into the Volume field and type in the volume amount.

   j. Make sure that the Unit field next to it shows the appropriate units. If not, click the down arrow and select the correct unit of measure.

Note: Remember, you can click the Information button next to the *'to'* field to see detailed information on the receiving container. If you click the Information button next to the *'from'* field, you can see information on the tank selected, such as the type of units used and how much waste is the tank.

   k. Click the Transfer button. The system makes the transfer.

   l. To see the results of the transfer, check the Preview Transfers box.

7. Perform a transfer from a tank to a tank.

   a. Select Tank Transfer from the left panel. The right panel displays the Tank System above and the Transfers fields below.

   b. Click the Type drop-down field to choose a transfer type, and select Tank to Tank.

Note: When you select the type of transfer in the Type field, the system automatically populates the *'from'* and *'to'* fields. For tank to tank transfers, the system chooses the first tank in the

system on the left side of the Tank System image for the *'from'* field selection, and the first tank on the right side of the image for the *'to'* field selection. You can change these selections as needed.

c. Go to the *'from'* field and select the tank from which you will transfer the waste. You can also select your tank by clicking the tank in the numbered tank in the image above, under Tank System.

d. Go to the *'to'* field and select the tank you want to transfer into.

e. Click into the Volume field and type in the volume amount.

f. Make sure that the Unit field next to it shows the appropriate units. If not, click the down arrow and select the correct unit of measure.

g. Click the Transfer button. The system makes the transfer.

h. If you want to see the result of the transfer, check the Preview Transfers box.

8. Sign off on the tank transfer task.

a. Click the Save icon to save your information. The icon turns inactive (no longer colored).

b. Click the Lock icon. The icon changes to a red closed lock. You can now sign off on the task.

c. Click Signatures in the left navigation panel. The Signatures panel opens to the right.

d. Click the Sign button. The Task Signature Authorization dialog box opens.

e. Type in a comment and click the Approve button. The Signature Result dialog box opens with the result, passed or failed.

f. If the signature passed, click the OK button. The dialog box closes and the Signatures panel shows a green icon under Signature, and with signer details below.

g. If the signature failed, look at the end of each line in the Signature Result dialog box for lines that have "Failed."

h. Redo the failed actions, and then try to sign off again.

6.6 Cementing Nonconforming Waste

Liquid and particulate TRU waste must be cemented to meet WIPP requirements. TRU waste is cemented in 55-gallon drums that have been prepared with bagout (or drumout) bags, bag sleeve, and rigid drum liner. No more than 200 grams of plutonium may be cemented in a 55-gallon drum. Each drum liner holds approximately 100 liters in volume, allowing for three inches of free space at the top, or freeboard. (Each vertical inch is equal to 6 liters.) The most common form of waste to be cemented is evaporator (EV) bottoms.

Each drum must be adjusted for pH before cementing, using sodium hydroxide (NaOH) solution. The ratios of waste to water to NaOH are set by supervisors, and are already entered into WCATS, so the system will automatically calculate the amount of NaOH needed for each drum, based on the

representative sample and target volume entered for the drum. Drums used for cementation must already have been inspected and accepted in the system in order for them to be available for selection, but operators can reject a drum at any time if it is damaged and record the rejection on WCATS. Once a drum is identified on WCATS as rejected, it cannot be selected for cementation tasks.

1. Log in to the WCATS desktop application. The main WCATS screen opens.
2. Go to the File menu and select New > Task > Process. The Create Process Task Profile screen opens.
3. Choose the company, facility, and process unit for the waste item from drop-down lists.
    a. Click the down arrow in the Company field and select the appropriate company.
    b. Click the down arrow in the Facility field and select the facility.
    c. Click the down arrow in the Process Unit field and select the Cement process unit.
    d. Click the Save icon above. The Task Creation Successful dialog box pops up with the message that the task was successfully created.
    e. Click the OK button. The Process Task Profile screen appears with your task ID number assigned.
4. Complete the pre-check.
    a. Click Pre-Check in the left navigation panel. The Checklist Review panel appears on the right.
    b. Click in the Response column next to each question. A small dialog box opens in the Response column that allows you to answer the question with a Yes or No.
    c. Click yes to each question, as appropriate. The red icon under Status turns green.
    d. IF you cannot answer each checklist question yes
    THEN stop this task, perform the actions necessary, and return to Pre-Check.

Note: All questions in the Pre-Check panel must be marked green in order to proceed with the cementation task.

5. Click Input Containers in the left navigation panel. The Task Input Containers panel opens on the right.
6. Select input container(s) for cementation.
    a. Click the Add Item button. The Add Input Container dialog box opens.
    b. Select search type in the Search Type field. You can search by Location/Time or by Workpath.

Note: After you have selected search type, you can select the storage unit from the Storage Unit field. This field depends on the selection made for Search Type. For example, if the search type is location, the Storage Unit field displays locations of containers. If the search type is work path, then the Storage Unit field displays the various work paths available for your task.

    c. Select the storage unit from the Storage Unit field. The Available Containers table populates with containers that are available for cementation.

Note: You can select one or more containers to add by pressing the Shift key and then dragging the mouse to highlight the desired containers (if they are on neighboring rows). If you want to select containers that are not next to each other, press and hold the Control key and select the containers you want.

d. Select one or more containers and then click the Add button. The containers are added to the Task Input Containers panel.

e. Click the Add Tank button if you need to add a tank as your input container.

f. The Add Input Container dialog box opens. Select the tank you want and click the Add button. The tank is added to the Task Input Containers panel.

g. To remove an input container (or tank), select the container and click the Remove button. The container is deleted from the Task Input Containers panel.

7. Select receiving container(s) for cementing waste.

   a. Select Receiving Containers from the left navigation panel. The Available Receiving Containers panel opens on the right.

   b. Select the receiving container you want then click the Add button. The container is moved from the upper to the lower table, under Selected Receiving Containers.

   c. Click the drop-down list in the Output Waste Stream field and select the appropriate waste stream for the container you selected.

   d. Click the drop-down list in the Output Workpath field and select the appropriate work path for your container.

   e. Click into the Target Volume column under Selected Receiving Containers. Type in the target volume for this container. The receiving container is completely set up for the cementation task.

8. Select equipment to be used in this task.

   a. Click pH Probe and Scale in the left navigation panel.

   b. Highlight the first row, pH Meter, and then click the Select button. The Available Equipment dialog box opens.

   c. Select the row that has the probe you want to use, and then click the OK button. The dialog box closes and the equipment is updated to the Calibrated Equipment panel, and the red icon next to the equipment name turns green.

   d. Repeat steps b–c for the platform scale.

   e. IF you need to change your equipment selection
   THEN select the equipment and click the Clear button, then repeat steps b–c.

9. Pack the container.

   a. Select Pack from the left navigation panel. The Transfer panel opens on the right showing the selected input container in the *'From'* field and the receiving container in the *'To'* field.

Note: The Source Item tab is already selected and shows information for the input container. If you selected more than one input container, you can select a different one by clicking the down arrow in the *'From'* field. The same applies for receiving containers in the *'To'* field. Also, the fields under Addition are white, indicating that you can make entries in them. Most of the screen is not white, which shows that those fields cannot be changed on this panel. In the table to the right of the Source Item tab, WCATS lists the SNM information entered for the container, along with volume information above it.

The sample information is listed above the SNM table and to the right, in the fields called Partition Method and Sample. The Sample field has a Plus icon, which allows you to add a new sample. Once a sample is added, it becomes available in the field's drop-down list. The Partition Method is preselected as Volume Based, which usually will not need to be changed.

b. Click the Plus icon next to the Sample field. The Create Sample dialog box opens.

c. Fill in the details of the sample.

d. Make sure to add the total and the pH information, then click the OK button. The dialog box closes, and the Sample field displays the sample by its date.

e. If the pH level is outside of preset tolerances, the system returns an error message (see Fig. 5-78 below). Click the No button and correct the level.

f. If you need to correct the pH by adding NaOH to the sample, note the amount added, and change the dialog box to show the new total amount of NaOH.

g. Resubmit the changes by clicking the OK button. The Create Sample dialog box closes and the sample is listed in the Sample field's drop-down list by date.

h. Fill in the information under Addition for the remainder of the waste.

   i. Type in the waste addition in the Waste (L) field.

   ii. IF this will empty the container
   THEN click the Emptied checkbox.

   iii. Click the Add button. The amounts in the Total column reflect the added waste, and the Emptied box is unchecked.

   iv. Type in the water you need to add, and then click the Add button. The system changes the amount in the Total column to reflect your addition.

   v. If applicable, select a description from the drop-down list in the other field.

   vi. Type in the amount in the Other (L) field, and then click the Add button. The system adds the amounts to the Total field on the right.

10. Add cement to the container.

    a. Click Cement Addition in the navigation panel. The Cement Addition panel opens to the right with the Pre-Cement Properties tab selected.

Note: The Pre-Cement Properties tab shows the existing state of the drum, after making the additions in the previous steps. The Cement Addition tab allows you to specify how much cement to add, and the Post-Cement Properties tab allows you to enter actual mix time, for accountability purposes. Entering the mix time is optional.

Note: When the volume entered for a container is more than 6 liters less than the target volume, the system gives you a message in red to that effect. This message does not affect the task in any way. You may ignore it, if needed, or you may add more water or other material to the receiving container. If you ignore the message, the task can still be successfully completed and approved.

b. Click the Cement Addition tab in the lower half of the panel. The Cement Addition fields open in the lower half of the panel.

c. Click the Add button. The Cement Addition dialog box opens.

d. Click into the white fields to enter cement add time and total weight after addition, then click the OK button. The dialog box closes, and the information is added to the Cement Addition panel.

e. If you wish to add the cementation mix time, click the Post-Cement Properties tab. The Cement Mix Time field opens below.

f. Type in the appropriate time in minutes. The cement addition information is complete.

g. Click the Save icon to save your information. The icon turns inactive (no longer colored).

h. Click the Lock icon. The icon changes to a red, closed lock. You can now sign off on the task.

11. Click Signatures in the left navigation panel. The Signatures panel opens to the right.
12. Click the Sign button. The Task Signature Authorization dialog box opens.
13. Type in a comment and click the Approve button. The Signature Result dialog box opens with the result, passed or failed.
14. If the signature passed, click the OK button. The dialog box closes and the Signatures panel shows a green icon under Signature, and with signer details below.
15. If the signature did not pass, note the reason for failure in the signature result list, then click the OK button. The dialog box closes and the Signature panel shows the status still pending (yellow icon under Signature).

    a. Go to the appropriate section and correct the deficiency.

    b. Click Signatures in the left navigation panel to return to the Signatures panel.

    c. Click the Sign button. The Task Signature Authorization dialog box opens.

    d. Type in a comment and click the Approve button. The Signature Result dialog box opens.

    e. Click the OK button. If the signature passed, the Signatures panel shows a green icon under Signature.

6.7 Performing Drum Closure in WCATS

Waste containers need to be closed and secured after packaging to ensure that the contents cannot be tampered with or changed. Operators also need to make sure a confirmation assay is performed after closure. Drum closure involves physically sealing containers, then using a tamper-indicating device (TID)

and for some containers, a padlock, to secure their contents. Operators can record these activities in WCATS, including date and time of closure and tracking approvals. The following instructions guide you through the steps in WCATS.

1. Log in to WCATS. The main screen appears.
2. Find a container.
    a. Go to the menu bar and click the Container icon. The Container Navigator screen opens.
    b. Go to Options > Find > By Labeled ID. The Input dialog box opens.
    c. Type in all or part of the labeled ID, then click the OK button. The Container Navigator screen shows the container in the table to the right.
    d. Select the container, and double-click the container ID. The Container Profile screen opens for that container.
3. Unlock the profile for editing.
    a. Click the Lock icon to unlock the profile. The Input Request Dialog box opens.
    b. Type in a reason for unlocking the profile, and then click the OK button. The dialog box closes and the container profile is unlocked for editing.
4. Create a closure mini-task.
    a. Select Payload Closure from the left navigation panel. The Payload Closure field appears on the right.
    b. Click the Display button. The Container Mini-Task Controller area opens.
    c. Click and hold the Task Options button and select Create Task. The Task Equipment dialog box opens.
    d. Click the Yes button. The Task Equipment screen opens.
    e. Select the equipment row you want. The Available Equipment screen opens.
    f. Select the equipment, and then click the OK button. The screen closes and reveals the Task Equipment screen. The selected equipment shows a green icon.
    g. Repeat steps e–f for the remaining equipment. When you are finished selecting equipment, click the Close button. The screen closes.
5. Record TID information.
    a. Click the Edit Task button in the Mini-Task area. Editable fields turn white and can accept input.
    b. Type the TID numbers in the appropriate fields.
    c. Type in the weight, if you found the container weight to differ from that listed in the profile.
    d. Save your work by clicking the save icon.
    e. Click Edit Task to close the mini-task to editing.

6. Sign off on the task.
    a. Click the Task Options button and select Sign Off. The Task Signatures dialog box opens.
    b. Click the Approve button. The Task Signature Authorization dialog box opens.
    c. Type a comment in the Comments field, then click the Approve button. The Signature Results dialog box opens with the result as Passed or Failed.
    d. Click the OK button. The Signature Results dialog box closes, and the Date/Time Selection dialog box opens.
    e. Verify the date and time listed, and change it using the up and down arrows, as needed, then click the OK button. The dialog box closes.
    f. Click the Close button on the Task Signatures dialog box. The box closes, and the container profile shows a green icon by the mini-task (executed).
7. To see tasks remaining for the container, select Pending Tasks from the navigation panel. The Pending Tasks panel opens.

6.8 Denesting

Denesting is simply taking items or containers out of a larger container. The result is that the inner containers are brought back into the WCATS system (to a not decommissioned state from a decommissioned state) and the outer container is decommissioned.

6.8.1 General Concepts

Item-based packaging can be reversed through a denesting process task. If, for example, four 55-gallon drums have been placed into a Standard Waste Box (SWB) through a packaging task, and at some later time the drums need to be taken out of the SWB, then a denesting task should be performed.

If some but not all of the drums need to be taken out of the larger container, then perform a denesting task followed by a subsequent packaging task to put containers back into the larger container. Note that the container identifiers of the larger container including the labeled ID will change because it represents a new container configuration.

Denesting process units are associated with storage units. Only containers that are located within the storage unit can be denested. When the denesting task is executed, the inner containers come into active inventory without the outer container, which is decommissioned.

6.8.2 Creating a New De-nesting Task

To create a new denesting task, perform the following steps:

1. Log in to the WCATS desktop application. The main WCATS screen opens.

2. Click File > New > Task > Process. A new task profile window appears. From the drop-down lists, select the Company, Facility, and Process Unit.
3. Alternatively, click the Process Task icon. The Process Task Navigator screen opens, showing Service Unit in the lower left as the default search path. Select the de-nest Company and Facility by clicking the expand icons in the left navigation panel. Click the desired denesting service unit. Go to File and choose New Task. The new denesting task profile window appears.

   Note: The task ID is shown as "Pending" and will not be assigned until the task profile has been saved.

4. Enter and save all the general information for your task.
   a. To change the task date and time from the default, click the up and down arrows provided at the right of the Task Date field.
   b. A default task name is created from the Company, Facility and Process Unit entries. If desired, the task name can be specified by editing the Task Name field.
   c. Click the Save icon. The Task Creation Successful dialog box opens.
   d. Click the OK button. The newly created denesting task profile screen opens.

6.8.3 Assigning Containers to a Denesting Task

Once a denesting task is created, container(s) must be assigned to the task. A list of available containers will populate depending on which service unit is chosen. To assign containers to a denesting task from within the task profile screen, perform the following steps:

1. Add input container(s).
   a. Click the Add button in the Task Input Containers panel's lower right. The Add Items/Containers to Task screen opens.
   b. One Process Location will be shown on the left and it will already be highlighted. Click the row of the container(s) on the right.
   c. Click the OK button. The dialog box closes, and the container(s) added appears in the Task Input Containers panel.

   Note: A container can also be taken off the selected containers list by selecting it, then clicking the Remove button. Containers in different Service Units cannot be included in the same denesting task.

2. Click the Save icon. You are now ready to sign and thereby execute the DENEST task.

6.8.4 Approving and Revoking a Denesting Task

There is typically only one Signatory to a denesting task. To complete and approve the denesting task for processing, do the following:

1. Select Signatures in the navigation panel of the task profile panel.

2. Click the Sign button located in the bottom right corner of the profile panel.
3. The Task Signature Authorization window appears. Comments may be added. To sign off and execute, click Approve.
4. In the event that the denesting task should be reversed, click the Sign button located in the bottom right corner of the profile panel and then click Revoke**.** This can only be performed if there are no subsequent tasks.

7 Administrative & Review Tasks

Administrative tasks include many review tasks, especially for TRU waste, as well as Waste Disposition Requests (WDR). These administrative tasks are all very similar, and often include a checklist review portion of the task.

7.1.1 Finding Administrative Tasks

Administrative Tasks can be found by looking up a Task ID or by using the Administrative Task Navigator (see figure 7.1). To use the navigator, set the search path (at bottom-left), then navigate to the proper service unit for that task.

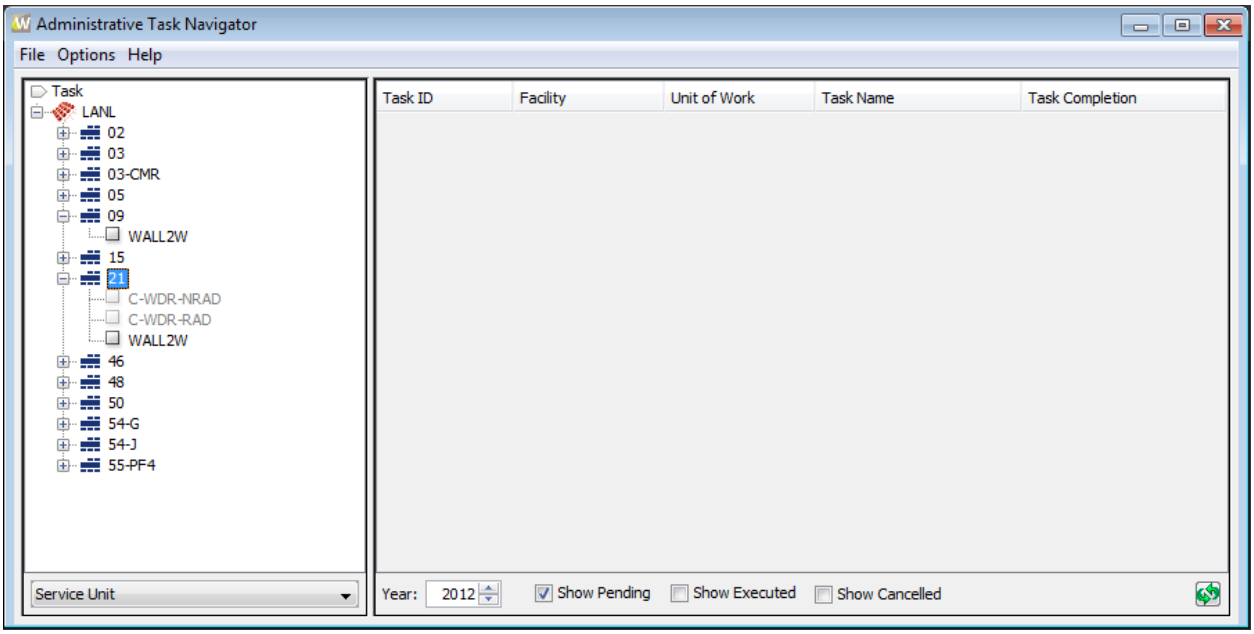


Figure 7-1, Administrative Task Navigator

7.1.2 Creating and Submitting New Administrative Tasks

1. Sign in to the WCATS desktop application.
2. Click on FILE-NEW-Administrative
3. Under "Service Unit" enter the correct Company, Facility, and Administrative Unit.
4. Click on the blue save icon button in the upper right-hand corner.
5. Your Task Id will be provided.
6. Select the "Input Items" panel to add the containers/items to the task. Click on the 'Add' button.
7. Search can be done two ways: a) If your Search type is by Workpath; select the correct work path for that container of waste and select the container(s) in the list below; or b) Search type:

Location/Time; select the correct storage unit for that container of waste and select the container(s)in the list below.

Note: Selection can be made by clicking and dragging your cursor over the container list or by using Ctrl-Click to select multiple containers.

8. Click 'OK' to add the containers to the Input Items screen.
9. Select the "Checklist" panel to complete the checklist. Highlight the question and in the 'Response' field clicked once and select the appropriate answer. If the answer needs to be specified, then double click in the 'Explanation' field to provide the answer. All questions will need a response.
10. If desired, select the "Documentation' panel to upload any supporting documents for this task. Files of almost any type can be uploaded.
11. Select the "Signatures" panel when ready to sign off. Highlight the appropriate signature and click the 'Sign' button. Click the 'Approve' button to sign off on the task. Verify that the signatures results have passed.

7.2 Submitting a Waste Disposition Request

After waste has been generated and properly characterized, it may be submitted on a Waste Disposition Request (WDR). In WCATS this is represented as an administrative task.

7.2.1 Creating and Submitting a WDR

Note: This task will usually be performed by a WMC or Waste Generator. It must be performed using the desktop application.

7.2.1.1 Create WDR Task

12. Sign in to the WCATS desktop application.
13. Click on FILE-NEW-Administrative
14. Under "Service Unit" enter the correct Company, Facility, and Administrative Unit. The Administrative Unit denotes whether the waste is radioactive or nonradioactive (e.g. WDR-RAD or WDR-NRAD)
15. Verify the service unit information is correct of where the waste is to be picked up. Click on the blue disk save icon button in the upper right-hand corner.
16. Your WDR Task Id will be provided.
17. Select the "Input Items" panel to add the containers/items to the WDR. Click on the 'Add' button.
18. Search can be done two ways for the designated facility: a) If your Search type is by Workpath; select the correct work path for that container of waste and select the container(s) in the list below; or b) Search type: Location/Time; select the correct storage unit for that container of waste and select the container(s)in the list below.

Note: Selection can be made by clicking and dragging your cursor over the container list or by using Ctrl-Click to select multiple containers.

19. Click 'OK' to add the containers to the Input Items screen.
20. Select the "Pickup Information" panel to complete the checklist. Highlight the question and in the 'Response' field clicked once and select the appropriate answer. If the answer needs to be specified, then double click in the 'Explanation' field to provide the answer. All questions will need a response.
21. Select the "Documentation' panel to upload any supporting documents for this shipment (i.e. MSDS, Gamma Spec, etc.) Word, PDF, Excel, images, Microsoft, etc. files can be upload from your desktop into WCATS.
22. Preview and Review the WDR Report to make sure the information is correct (see Section 7.2.2).
23. As the WMC you will need to sign off on this Administrative WDR Task.
24. Select the "Signatures" panel when ready to sign off. Highlight the 'Waste Management Coordinator and click the 'Sign' button. If you have not saved this task already; you will be prompt; answer 'Yes' if you are finished editing and save your changes to this task. Click the 'Approve' button to sign off on the task. Verify that the signature(s) results have passed.
25. You have completed your WDR – the Waste Reviewer will receive a notification.

7.2.1.2 Review and Sign Off

Note: This function is to be performed by the WDR Reviewer. It must be done using the WCATS desktop application.

1. To open the WDR task, click on link in email notification or go to FILE-FIND-TASK-Administrative and type in the task number.
2. You have an option to print the WDR: In the Administrative Task Profile screen; click on "Reports" and click on Waste Disposition Request. Print a hard copy or print a pdf to your desktop.
3. Review all panels of the WDR Task:
4. Click on the 'Input Items' panel and double click on the container id to pull up the container profile for reviewing.
    a. Review all panels of the Container Profile.

Note: click on the magnifying glass by the Waste Stream field to view the waste stream profile.

    b. Check the work path to see if the waste is an item or container and the waste type.
    c. For TBD waste type, add EPA codes and UHCs if needed.
    d. Verify container type and weights/volumes
    e. If only an item, a transport container will need to be added at the Shipping Task along with PSN.
    f. If already containerized, add the PSN to the container profile at the WDR Task.
    g. For corrections see step 13 below.
5. Adding PSN in the Container Profile at the WDR Task:
    a. Unlock the container profile: Click on 'Create' button.

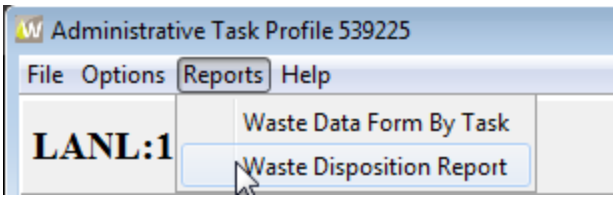
b. In the Shipping Name builder ; Select most recently used or click on find icon (binoculars)
c. Type in UN/NA number click on finder icon or
d. Type in the name or partial proper shipping name in the finder, e.g. "Aero".)
e. Select PSN, click 'OK'

F. Complete all application fields (see section below on "Shipping Description Builder (PSN)")
g. Click 'ok'
h. Save – lock profile or close

6. Select signature panel and select "Waste Disposition Request Reviewer" click on 'Sign' button.
7. Verify the date and time the WDR task occurred.
8. Click 'OK'.
9. Verify signature result passed.
10. You have an option to print the WDF: Under the 'Input Items' panel; double click on the container id for the Container Profile to appear. Click on "Reports" in the container Profile screen; click on "Data Form". Print a hard copy or print a pdf to your desktop.
11. You have an option to print the All-in-One labels: In the Administrative Task Profile screen; click on "Options" and click on 'Print All-in-One Labels'.
    a. Select the appropriate color of the printer type (i.e. blue, yellow or magenta)
    b. Click on 'Print All'.
12. The Waste Reviewer has the option to reject one or more containers from a task if they do not pass the review. See 'Container Rejection' below.

7.2.2 WDR Reports

The Waste Disposition Report contains most of the relevant information about the containers submitted on a WDR Task. These can be printed from within a WDR task by selecting Reports > Waste Disposition Report.



After the report is displayed on the screen, you can choose to print it or save it to your computer.

CHEMLL WASTE DISPOSAL REQUEST - NON-RAD & MLLW 129883

LANL: TECHNICAL AREA 05 05-Jan-2012 8:29 am

ITEM / CONTAINER INFORMATION

Labeled Id [Chemlog BC]	Volume Container Type	Gross Wt (Kg) Tare Wt (Kg)	Waste Stream Id	Phys State	Accum Start Date	Waste Type Abbr: Description of Waste	EPA Codes	Area Type*	Cost Codes/Percent/Status
10166188	9.0-CY OT Unspecified	907.1 0.0	23868	S	01/11/13	SW-OTHER: Solid waste [PPE, gloves, sampling equipment, pit liner, etc.] with minor additional constituents, see attached			6A000A MR1A 0140 H200 100% A
10166189	9.0-CY OT Unspecified	907.1 0.0	24228	S	01/09/13	SW-OTHER: Solid waste [PPE, gloves, sampling equipment, pit liner, etc.] with residual soil and minor additional constituents, see attached			6A000A MR8R 032N GX00 100% A

Area Types: S = SAA, L = <90 Day Area, T = TSDF, U = Universal, O= Used Oil, P= PCBs, M= NMSW, D= Rad Staging, R= Rad Storage

WDR Report

7.2.3 Container Rejection, Locking, and Status

7.2.3.1 Container Rejection

1. WDR Line item veto (rejecting a container):
    a. For corrections to the container profile information and instead of rejecting or revoking signature; Contact the WMC for resolution by FILE-SHARE PROFILE – Address to: WMC; add message, click submit and 'OK'. WMC addressed in the message will received an email with the Task profile number and a link to connect right into WCATS. If the WMC needs to fix they will need to revoke their signature on the WDR task. The WMC makes the appropriate correction(s). The WMC should then share the WDR profile with the Waste Reviewer to let them know correction have been made. Or

    b. For corrections to the container profile information and instead of rejecting or revoking signature; Contact the WMC for resolution by phone – discuss corrections and per the conversation with the WMC the Waste Reviewer unlocks the container profile and makes the corrections.

    c. Reject container(s) from a WDR task: The reviewer does not sign if WDR has only one container. Waste Reviewer will need to either fix it by unlocking the container profile, share it with the WMC or call or the WMC to fix it.

    d. If rejecting a container(s) from a WDR task is legitimate: Multiple containers or just one container on one WDR: The waste reviewer will rejects XX containers and/or approve XX containers; The Waste reviewer adds a comment to reject the container – this comment will show up in the Admin Task profile report. For multiple approved/rejected containers, the Waste Reviewer signs (approves) the WDR task and go on to creating the shipping task for the approved containers. For one container, the Waste Reviewer does not sign the WDR task. Waste Reviewer will need to contact the WMC to fix the

rejected containers. The WMC will fix rejected containers and re-submits those containers on a new WDR task.

7.2.3.2 Container/Task Locking

Containers are available to a WMC to edit until the first signature is signed on a WDR task. After this point, the container is locked and the WMC may only transfer waste within the same facility. For example, the WMC might move waste to a pickup location from a storage room (using the Intra-Facility Transfer mobile application, see 8.4) when the waste is ready to be picked up. This is done in order to maintain a record of the inventory in case of audit.

After the WDR has at least one signature, only TSDF Personnel are allowed to edit the containers. This is allowed via override function that is set in the TSDF Usergroup.

7.2.3.3 WDR Status

A WDR, like any task, can have one of three states: pending, executed, and cancelled. The task status is shown in the header bar of the profile (see below).

Header Bar of Administrative Task Profile with Task Status Highlighted

Pending Status - A task in pending status does not have all of its signatures approved. When it has no - signatures it is available to be edited.

Executed Status - An executed task has passed approval. All signatures have been approved and the task passed all of the system's task execution logic, which is enforced on tasks to prevent errors in the waste.

Cancelled Status - A task in cancelled status is often used for tasks that are no longer needed. They may have been created in error. This is the alternative in WCATS to deleting a task.

7.3 Work Path Assignment Tasks

Work path assignment tasks are administrative tasks that assign new workflow to containers when the tasks are executed. The new work path assignments are made by end users and they are selected based on available options on a container's waste stream. These tasks are often included at the end of work paths so that new workflow can be assigned to containers.

7.4 Workflow Move Requests

Workflow move requests, also known as container requests, are a specific type of administrative task. For more inofmration on these tasks and how they tie in to intra-facility transfers on the mobile application, see 8.4.2.

8 Shipping and Transferring Waste

One of the most important aspects in the disposition process is the proper shipping and storing of waste. The following sections will explore the shipping task subsystem, including creating a shipping task and adding containers to it.

8.1 General Concepts

The shipping task subsystem is a prerequisite task to the production of the EPA uniform hazardous waste manifest. It provides support for the creation of shipping tasks that will later be placed onto the manifest which accompanies the waste in shipping. The main goal of the shipping task subsystem is to define the shipment, allot containers to the shipment, and maintain documentation of required signatures for shipments.

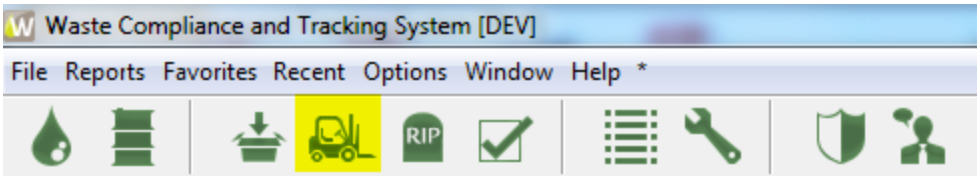
Users working with shipping tasks use the shipping task navigator screen and the task profile screen. The shipping task navigator screen, which is shown in Figure 8-1, stores all recorded shipping tasks produced in the system. Search path options for the navigation panel include company–originating facility or company–destination facility, with the additional option to select year date.

Within the profile panel of the shipping task navigator, three different types of shipping tasks can be displayed: pending tasks, executed tasks, and cancelled tasks. Users can select any or all of the options to view if desired. The displayed tasks are organized in the following columns: task ID, originating facility, destination facility, destination unit, task name, and task completion date.

The following sections have been laid out to replicate the order in which a user would experience the shipping task subsystem while performing a shipping task. The creation of the shipping task profile contains such items as defining a shipping task, adding containers, and gaining required signatures for proper processing. Beginning with the navigator, this section assists in the creation of a new profile, the viewing of existing profiles, and ultimately the viewing and/or printing of the profile report.

8.1.1 Opening the Shipping Task Navigator

The shipping task navigator contains the complete record of all shipping tasks created in the application. From this screen, a user can either select an existing task profile to view and/or modify or they can create a new task profile. This navigator can be accessed by clicking on its icon in the button bar.



WCATS Button Bar with Shipping/Transfer Task Navigator button highlighted

8.2 Creating a New Shipping Task

Note: Before you begin, you will need to know the following:

- Task date
- Generation location information
- Destination location information

To create a new shipping task from within the navigator screen, perform the following steps:

1. Log in to the WCATS desktop application. The main WCATS screen opens.
2. Click the Shipping icon. The Shipping Task Navigator screen opens, showing Company and Originating Facility as the default search path.
3. Select the shipment's originating company and facility by clicking the expand icon in the left navigation panel.
4. Go to File and choose New > Task. The new shipping task profile screen appears with the originating company and facility fields already populated.

   Note: The task ID is shown as pending and will not be assigned until the task profile has been saved. However, the shipping task name is already being created based on the originating company and facility selected. This will change as you fill in the destination fields.

5. Enter all the general information for your shipment.
   a. From the drop-down lists next to the appropriate fields, select the following:
      - destination company
      - destination facility
      - destination storage unit
   b. If you prefer, enter a name in the task name field.

   Note: This step is optional. A task name is created from the origination and destination locations if the user does not enter a name.

   c. To set the task date, highlight the element you want to edit and click the up and down arrows provided.
   d. Click the Save icon. The Task Creation Successful dialog box opens.
   e. Click the OK button. The newly created shipping task profile screen opens.

8.2.1 Assigning Containers to a Shipping Task

Once a shipping task is created, containers must be assigned to the task. A list of available containers will populate depending on which service unit is chosen. (To reopen a shipping task, see section 6.3.) To assign containers to a shipping task from within the task profile screen, perform the following steps:

Note: Before you begin, you will need to know the following:

- Service units
- Existing container ID numbers and labeled IDs.

1. Select Input Containers from the left navigation panel; the Task Input Containers panel opens to the right.
2. If necessary, unlock the profile for editing by clicking the red closed Lock icon on the toolbar.
    a. An input request dialog box opens. Enter a reason for requesting authority to edit this manifest (e.g., assigning containers).
    b. Click OK. The Shipping Task profile is open for edits.
3. Add input container(s).
    a. Click the Add button in the Task Input Containers panel's lower right. The Add Input Container screen opens.
    b. Select Search Type using the down arrow. The second field to the right changes depending on the type selected: work path or date and location.
    c. Select the work path (or location) you want from the second field.
    d. Click the row of the container you need to select it.

Note: Users can choose more than one container by holding down the Shift key, then clicking the rows until all containers are selected. If you need to select containers whose rows are not next to each other, use the Control key instead of the Shift key.

    e. Click the Add button. The dialog box closes, and the containers added appear in the Task Input Containers panel.

Note: A container can also be taken off the selected containers list by selecting it, then clicking the Remove button. Containers from different service units can be included in the same shipping task.

4. Click the Save icon to add the containers to the shipping task.

8.2.2 Rejecting an Input Container

Containers that do not meet proper shipping requirements can be rejected from the shipment while still being documented on the shipping task. To reject a container that has been added to the shipping task, perform the following steps:

1. Select the desired container.

2. Click the Reject button in the bottom right corner of the profile panel. The Input Request dialog box opens.
3. Enter the reason for rejecting the container from the task (e.g., container not sealed properly).
4. Click the OK button to change the status of the selected container.

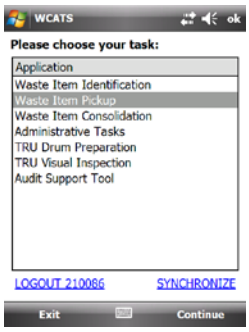
Note: The container's status (in the Reject Status column) changes from OK to Rejected.

8.2.3 Completing and Approving a Shipping Task

Before a shipping task can be processed it must go through the checklist review, and then be approved and signed by a proper signatory assigned by the system administrator. Signatories are given the option of approving or revoking the shipping task. To complete and approve the shipping task for processing, perform the following tasks:

1. Select Signatures in the navigation panel of the task profile screen to display the signatures profile panel shown in Figure 6-13.
2. Click the Sign button located in the bottom right corner of the profile panel.
3. A notice appears saying that the shipping task is being approved. To verify, click OK.

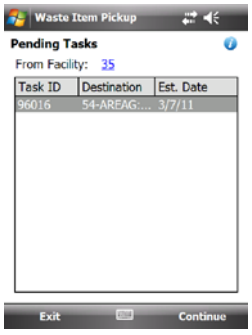
8.3 Performing a Mobile Inter-Facility Inventory Pickup Task



8.3.1 Open the Pickup task

To view a pickup task, perform the following tasks:

1. Within the WCATS mobile device task selection screen, select Inter-Facility Pickup and click continue to display the pending tasks table.
2. To select the area of which tasks to view, click the from facility hyperlink to display the select facility screen.



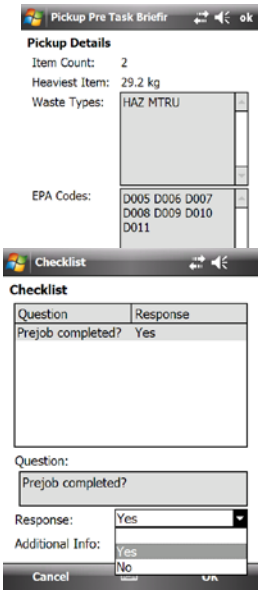
NOTE: For your convenience, WCATS automatically selects LANL as the company. If you would like to select an alternate company, click the company hyperlink to view a list of available companies.

3. From the select facility screen, select a facility from the list provided and click ok.
4. Once the facility has been selected, from the pending tasks table, select the desired task and click continue to display the pickup task screen.

8.3.2 Perform the Pre Task Briefing

Before performing the pickup, a pre task briefing and checklist review must be completed. To complete the pre-task briefing, perform the following tasks:

1. From the pickup task screen, click the brief button to display the pickup details.



Note: Notice, the pickup details include item count, the weight of the heaviest item, waste types included, and EPA Codes included.

2. Once the brief has been reviewed, click close to return to the items screen.

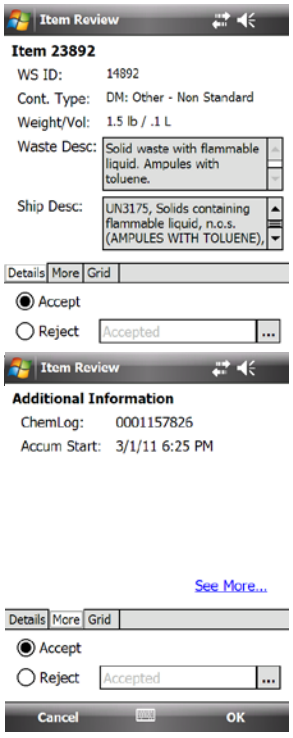
8.3.3 Perform the Checklist Review

To complete a checklist review for a waste item pickup task, perform the following tasks:

1. Within the pick-up task items screen, click the checklist button to view the available questions for review.
2. For the presented questions, select a response for each by selecting the desired question and then selecting the appropriate response from the drop down list provided.
3. If any additional information needs to be documented, enter the information in the field provided using the mobile keypad.
4. Once all responses have been properly entered, click ok to return to the pickup task screen.

8.3.4 Approve a Waste Item for Pickup Task

Once the user has been properly briefed on the pick-up task and has completed the required checklist review, each waste item can then be individually reviewed and accepted for pick-up. To review each waste item, perform the following tasks:



1. Within the pick-up task items screen, select the desired item and click open to review the item details for acceptance.
2. Within the item review screen, review the item details and validate by clicking the accept button.

Note:

- To view additional information (ChemLog and accumulation start date) for the waste item, click the more tab, below the shipping description box. Within the addition information tab, users can view the full waste item profile by clicking on the *'See more'* hyperlink.
- To view the transport container for the waste item, click the transport tab below the shipping description box. Within the transport tab, if a transport container is applicable, the ID is provided with the accompanying shipping description.

- To view the exact grid location for the waste item, click the grid tab below the shipping description box.

3. If all the provided information is correct, click the accept button and skip to step 6.
4. If the information provided is not valid, the waste item can then be rejected for pick-up by clicking the reject button.
5. A reason for rejection can be entered in the field provided, using the mobile keypad.

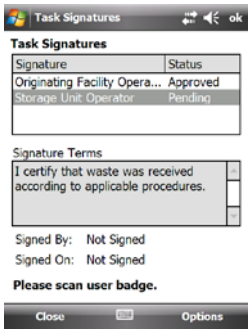
Note: For your convenience, pre-defined reasons for rejection are available by clicking the *'More'* button to the right of the entry field.

6. Once the item has been accepted or rejected for pick-up, click *'OK'* to return to the pick-up task screen.

8.3.5 Execute the Pickup Task

Once the pre-task briefing and the checklist review have been completed properly, the pickup task can then be executed. Two signatures are to be obtained for a complete execution of a pickup task; the originating facility operator signature from where the item(s) are being picked up from and the storage unit operator signature from where the item(s) are being moved to. To execute a pickup task signature, perform the following tasks:

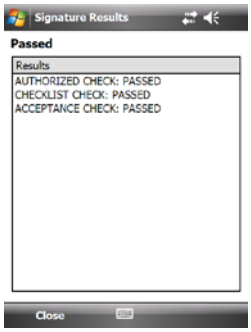
1. From within the pickup task screen, click the sign off button to display the task signatures screen.
2. From the signatures table, select the desired signature to execute.
3. Review the signature terms provided.
4. To certify that the shipment has been prepared and documented properly, scan your official LANL badge using the mobile device scanner provided.



Note:

- To properly scan your badge, first place the Z# barcode, located on back of your badge near the bottom, in front of the scanner window, located on the back of the mobile device. Press one of the available yellow buttons to scan the barcode and enter your information.
- To sign as another user, click option and sign as another user, then scan the user's badge.

5. Once your badge has been scanned, the signature results will then be displayed.



Note: If the execution did not pass, contact Waste Help at 5-2494.

6. If the execution passed, click close to return to the task signatures screen.

Note:

- To revoke a signature, select the desired signature and click the revoke button provided.
- To revoke all signatures, click options and then revoke signatures.

8.4 Performing a Mobile Intra-Facility Transfer Task

To allow for real-time tracking of limits related to the waste, several mobile applications are provided in the system. These applications are used in the field with the waste and the information can be synchronized from the mobile application into the consolidated WCATS database. In addition to simple transfers, containers can be requested to be moved and managed according to the pending tasks on their work path.

8.4.1 Basic Intra-Facility Transfers

An intra-facility transfer can be documented using the mobile device. To complete an intra-facility transfer task, perform the following tasks:

1. Within the WCATS mobile device task selection screen, select Intra-Facility Transfer and click continue.
2. Aim the provided scanner on the backside of the mobile device to the barcode of the item awaiting transfer.
3. Press any of the provided yellow buttons and scan the barcode to enter the container ID into the provided field.

   Note: The ID can also be entered using the mobile keypad.
4. Click *'Continue'* to display the details of the requested container.
5. Review the current details to ensure proper selection.

   Note: If any of the provided information is not correct, contact Waste Help at 5-2494.
6. Using the drop down lists provided, select the destination details and click ok to review the transfer task details.
7. If other items are to be included in this transfer task, click the add button to enter the additional container ID in the same manner as above.

   Note:
   - To edit details for an added item, select the desired item and click the edit button provided.
   - To remove an added item from the transfer task, select the desired item and click the remove button provided.
8. Once all items have been properly added to the transfer task, click next to display the checklist review.
9. For the presented questions, select a response for each by selecting the desired question and then selecting the appropriate response from the drop down list provided.

10. If any additional information needs to be documented, enter the information in the field provided using the mobile keypad.
11. Once all responses have been properly entered, click next to return to display the task signatures screen.
12. From the signatures table, select the desired signature to execute.
13. Review the signature terms provided.
14. To certify that the shipment has been prepared and documented properly, scan your official LANL badge using the mobile device scanner provided.

    Note:

    - To properly scan your badge, first place the Z# barcode, located on back of your badge near the bottom, in front of the scanner window, located on the back of the mobile device. Press one of the available yellow buttons to scan the barcode and enter your information.
    - To sign as another user, click option and sign as another user, then scan the user's badge.
15. Once your badge has been scanned, the signature results will then be displayed.

    Note: If the execution did not pass, contact Waste Help at 5-2494.
16. If the execution passed, click finish to complete the task.

    Note:

    - To revoke a signature, select the desired signature and click the revoke button provided.
17. To revoke all signatures, click options and then revoke signatures

8.4.2 Container Request Tasks

Container Request tasks are administrative tasks that are set up to request the movement of specified containers into a new storage unit. Request tasks use at least two signatures. The final signature on a request task is reserved for the WCATS application, which automatically signs the signature and executes the task when all requested containers have been moved to the desired location.

1. Create the administrative request task using File > New > Task > Administrative. Select the appropriate request service unit.
2. Add the desired containers to be moved using the 'Input Items' panel.
3. Set the desired location for the containers to be moved into using the 'Destination Unit' panel.
4. Sign the task.
5. Container request completion can be tracked using the 'Administrative Request Status' report on the task or by using the 'Request Status' panel.
6. Containers that are pending movement to a new unit can be viewed in the Intra-Facility Transfer mobile application.

7. Once containers have been moved into the desired unit, they are marked as complete, even if they are later moved into a different unit.
8. When all containers on a task are complete, the WCATS application automatically signs the final signature and sets the task's status to 'executed'.

8.4.3 Intra-Facility Transfer with Pending Containers

Containers can also be viewed in the Intra-Facility Transfer mobile application using the 'Pending Containers' option. This option allows the user to determine which containers are ready to move to another service unit based on the pending tasks of the work path.

8.5 Managing a Shipping Task

As tasks progress from creation to execution WCATS keeps track of information that is important to revisit. In many cases it is important to add clarifying information via comments, verify changes made to the task, finding previously-created task profiles, and printing associated reports.

8.5.1 Adding Comments

Additional comments can be documented in the comment log for any shipping task to be included in the shipping task report. This can be done for tasks which do not yet have any signatures completed. To add comments to the comment log, perform the following tasks:

1. Select Comment Log in the navigation panel of the shipping task profile screen for the comment log profile panel to appear. (To reopen a shipping task, see section 6.3.)
2. To unlock the profile for editing, click the red closed Lock icon on the toolbar. The input request dialog box opens.
3. Enter a reason for requesting authority to edit this equipment profile (e.g., adding comments).
4. Click the OK button. The comment log profile panel is activated.
5. Click the Add button located in the bottom right corner of the profile panel. This deploys the new equipment profile comment screen.
6. Enter the comments you wish to provide for the shipping task (e.g., shipping task awaiting approval).
7. Click the OK button to set the comments into the comment log.
8. Click the save icon on the toolbar to set the comments made into the shipping task profile.

8.5.2 Viewing the Edit Log

The application keeps a log of all edits made to any shipping task profile created. To view the edit log for any given equipment profile, do the following steps:

1. Select Edit Log in the navigation panel of the shipping task profile screen to display the edit log profile panel.
2. To view all edit records, check the show all edit records option.
3. To view all quality records, check the show all quality records option.

   Note: Notice the edit log is organized by time and information provided by the editor. The edit log is permanent and not editable.

8.5.3 Opening an Existing Shipping Task Profile

Once a shipping task profile has been created, it is stored in the shipping task navigator with the potential to be reopened and edited at any given time. Within the navigator, a user can locate and reopen any shipping task profile in a variety of ways. If the user knows the origination or destination facility, they are able to locate the profile using the search paths in the navigation panel of the shipping task navigator. If the user knows the task ID or the task name, they can refine their search under Options on the menu bar.

To reopen an existing shipping task profile using the navigation panel in the navigator, perform the following tasks:

1. Click the expand icon next to the origination company.

   Note: Depending on which search path is selected in the navigation panel, options are displayed by company-origination facility or company-destination facility. To switch search paths, select from the drop-down list provided.
2. Under the company chosen, click the desired origination facility.

   Note: Notice that once the facility is selected, a list of shipping task profiles is populated in the profile panel of the navigator screen.
3. When the desired shipping task profile has been located, double-click the corresponding row. This deploys the shipping task profile.

To reopen an existing equipment profile in the shipping task navigator using a task ID, perform the following steps:

1. Go to the Option menu and select Find Task > By Task ID. An input box appears.
2. Enter the task ID in the field provided.
3. Click OK. The desired shipping task profile will be displayed in the profile panel of the navigator screen.
4. Double-click the displayed shipping task profile to deploy the equipment profile.

To reopen an existing profile in the shipping task navigator using the task name, do the following steps:

5. Go to the Option menu and select Find Task > By Task Name. An input box opens.

6. Enter the task name in the field provided.
7. Click OK. A list populates the selection screen of shipping task profiles with the provided name.

   Note: Notice that many profiles with the provided name appeared. A name search may not be as accurate as the user would like, it is recommended that when assigning and/or searching a name to a profile that the user be as specific as possible.

8. Double-click the row of the desired shipping task name to deploy the task profile.

   Note: An alternate search route can be found in the main application page under Search in the menu bar. Here you will find the similar options to open an existing shipping task profile as stated previously, either by task ID or by task name.

8.5.4 Printing the Storage Task Profile Report

To print the storage task profile report from any of the profile panels within the shipping task profile, perform the following tasks:

1. Click the Print icon on the toolbar of the profile screen. The storage task profile report appears in a separate window.
2. Click the Print icon in the top left corner of the screen to deploy the Microsoft print selection screen.
3. Select the appropriate printer, range of pages, and number of copies you need.
4. Click OK to print the document.

   Note: The storage task profile report can also be exported as an electronic copy (Crystal Report RPT, Adobe Acrobat PDF, Microsoft Word editable RTF, Rich Text Format RTF, or Comma-Separated Values CSV) by clicking the Export button next to the Print button on the storage task profile report screen. By selecting the export format, page range, and location from the provided export form, a user can keep an electronic copy of the storage task profile report locally on their machine.

8.6 Using the Shipping Description Builder

Creating Proper Shipping Names can be completed in the Container profile and the Manifest Profile under the Shipping Descriptions panel.

1. Unlock the profile (from within the Container or Manifest) and add comment to create/modify shipping names.
2. The Shipping Description builder screen will appear after clicking on the 'create' button.
3. Under #1 'Proper Shipping Name' the pull-down list is for what was recently used; or click on the 'binoculars' button to find the appropriate Proper Shipping Name.
4. Under #2 'Prefix PSN' will list the "RQ" or "Waste" in front of the shipping name. The pull-down list is for non-regulated shipping names.
5. Under #3 'Suffix PSN' will list the selection at the end of the shipping name.

6. Under #4 'Technical Name will list the selection and any entry between the proper shipping name and hazard class. Don't forget to include the parenthesis!
7. Under # 5 'EPA Codes' will list the EPA codes in the shipping description at the end of the hazard class and packaging group.
8. Under # 6 'Rad Materials' will list when selected "Also Contains Radioactive Materials" at the end of the proper shipping name.
9. Under # 7 'Nuclides' will determine from the selection if 95% of nuclides ("95% Risk") or all of the nuclides ("All Nuclides") are to be listed as part of the shipping name. The blank box on the right side is for adding additional nuclides.
10. Under # 8 'Nuclide Form / Activity' will list the selection for the chemical state of the material; and the selection on the right side is for the "Units" of the nuclides to be listed as part of the shipping name.
11. Under #9 'Rad Label' will list the selection for the radioactive label. The 'Add' button to the right side is for identifying other secondary label requirements. The secondary label selection will be displayed only on the All-in-One Label.
12. Box #10 'Suffix Other' will list the T.I. when selected (rounding up one); and any additional information needed which will be displayed at the very end of the shipping description.
13. In the upper right-hand corner of the Shipping Description builder; click on the 'Rad Information' button to display the rad calculations of the radioactive materials.
14. In the upper right-hand corner of the Shipping Description builder; click on the 'LDR' button to select the treatability group for TBD waste types requiring LDR.

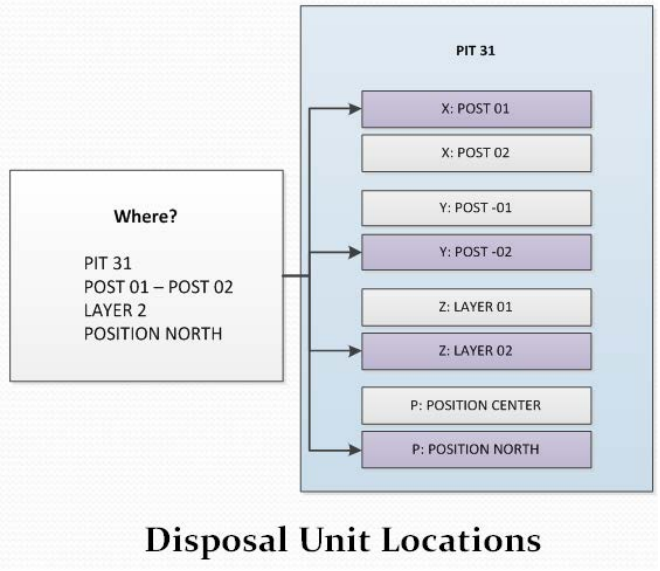
9 Disposing and Retrieving Waste

Disposal tasks are a terminal operation in WCATS. After this point, waste containers become decommissioned and no longer appear as requiring service. If they are to be moved to another location, they can be reactivated.

9.1 Understanding Waste Disposal Units & Grid Locations

WCATS represents physical locations by dividing them into a hierarchy of related units. That hierarchy includes Companies (such as LANL), Facilities (such as LANL Technical Areas), Service Units, and Grids. Service Units can represent physical or logical locations. Disposal service units usually correspond to physical locations.

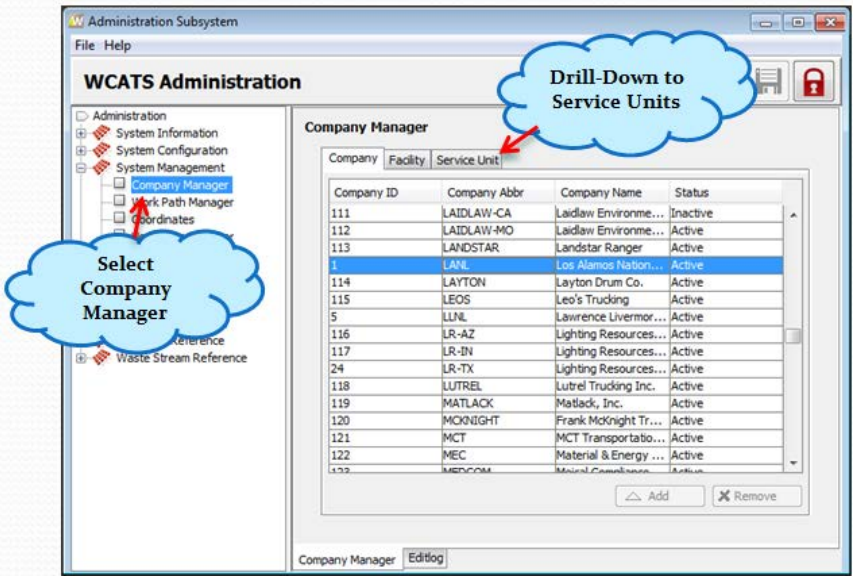
Grid locations represent the logical division of disposal units. For disposal units X, Y, Z, and P (position) coordinates are used.



Disposal Unit Locations

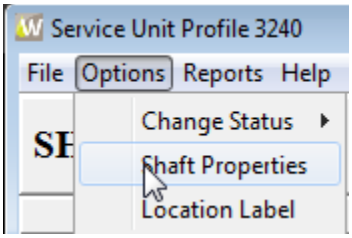
9.2 Managing Disposal Shafts

WCATS uses two administrative screens to manage disposal shaft properties and actions. These are accessible from the service unit profile for a shaft. To access the disposal service unit profile for a shaft, use either the company manager found in the administrative subsystem or click on the Magnifying glass icon from a task that uses that shaft.



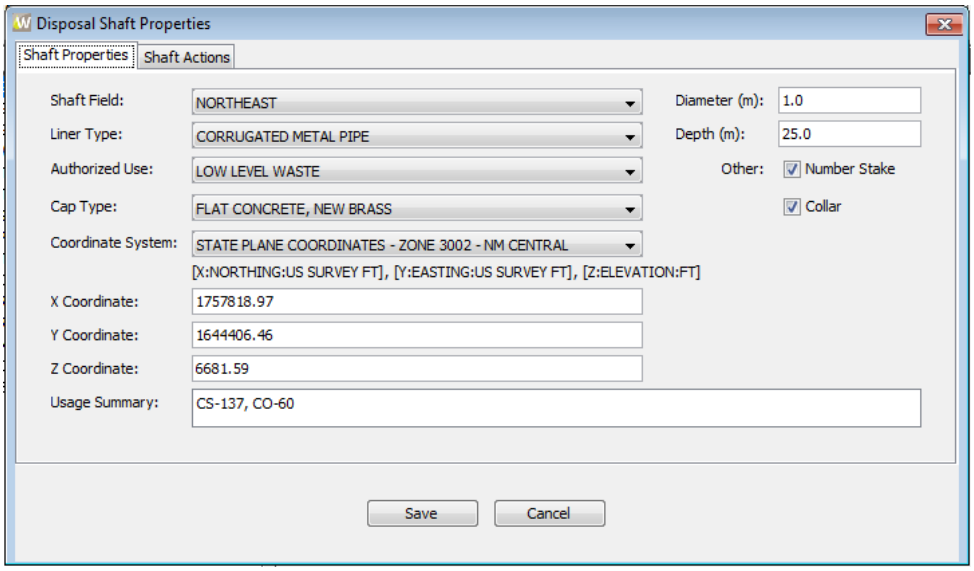
The Company Manager can be used to navigate to service unit profiles

9.2.1 Shaft Properties



Once the service unit profile for the shaft has been opened, the shaft properties menu can be opened by selecting *Options* then *Shaft Properties*. This will open a menu that is accessible only to certain users. If you believe you should have access to this menu, please contact Waste Help (see section 1.3).

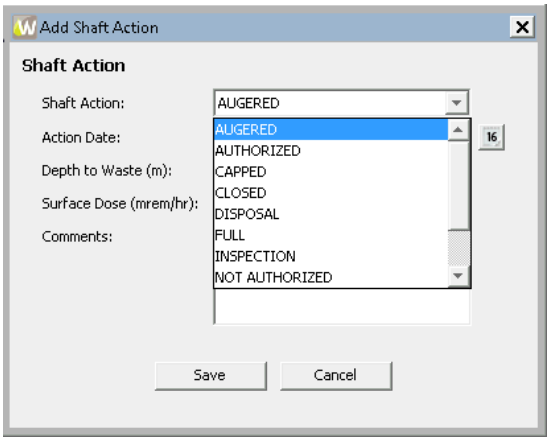
The shaft properties screen is seen below. It can be used to enter data about the disposal shaft.



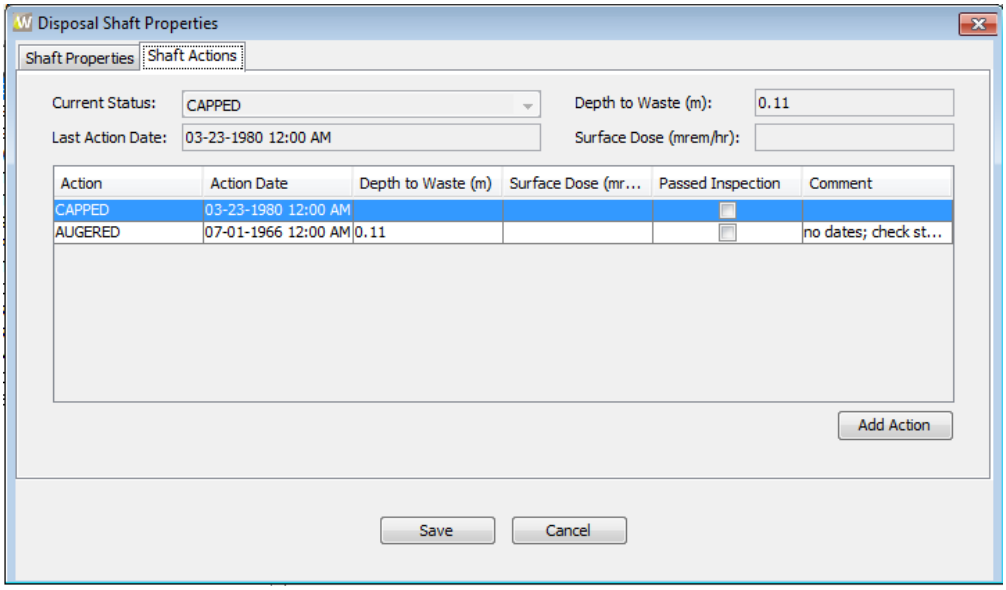
Shaft Properties Window

9.2.2 Shaft Actions

Shaft Actions can be entered by selecting the *Shaft Actions* tab in the *Disposal Shaft Properties* window. These actions include dates. Many types of actions can be entered, including augering, capping, inspections, and others. To add a new action, select the button and then enter the action type and other appropriate data into the pop-up window (see right).

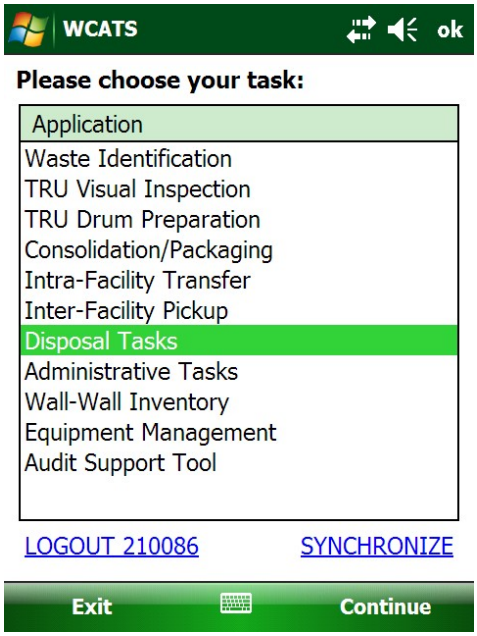


Note that if a shaft is to be closed it should also be listed as inactive in WCATS so that waste will no longer be processed there. Please contact Waste Help (see 1.3) for assistance in inactivating a disposal shaft or any other service unit.



Shaft Actions Tab

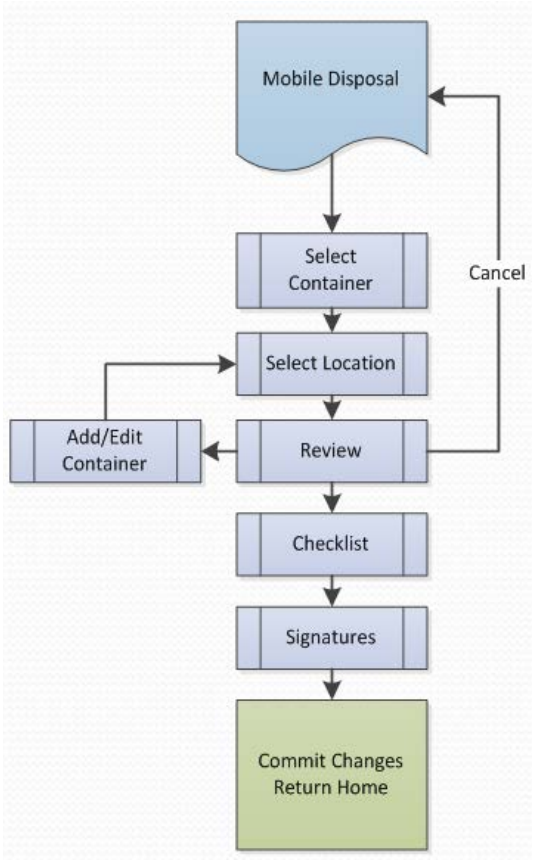
9.3 Disposing of Waste Using the Mobile Device



Disposal Tasks are usually entered into WCATS using the mobile device in the field. This allows the user to capture the necessary information as the task happens.

To create a disposal task, select the *Disposal Tasks* option from the mobile device. Select a container to be disposed of by scanning it. Note that containers must be present at the same facility as the disposal unit in WCATS in order to be disposed.

After selecting the first container, select the location and enter the X, Y, Z, and P coordinates. This can be done either by scanning the WCATS location barcode (preferred), which is seen below, or by selecting it from the drop-down list. When it is scanned by the device this allows the user to be certain that the correct location is selected.



Proceed to the next screen. Scan more containers if more are to be disposed of in the same disposal unit. Each container can have its own grid locations (X, Y, Z, and P).

Finally, enter a checklist review and then sign off on the task. Scan your badge and review the signatures, and if they are valid you will be able to finish the task.

Note: The task does not become finalized until the mobile device is synchronized. This allows the system to account for any inventory limits that may be present (see section 10.4).

WCATS Location Barcode

9.4 Desktop Disposal Tasks

Desktop disposal tasks are similar to shipping tasks. For more information on these, see that section. Disposal tasks mark the waste as decommissioned. They transfer the waste into disposal service units for inventory purposes.

Create a new task by selecting File > New > Task > Disposal. Add the appropriate containers to the task using the 'Input Items' panel. Finally, when signoff is ready, use the 'Signatures' panel.

9.5 Retrieval Tasks from Disposal Units

Containers are restored from disposal units into active inventory using retrieval tasks. These tasks use a special storage unit that allows decommissioned containers to be added to the task and moved into active inventory. Once the container is moved into the retrieval unit on the desktop application it can be moved into a true physical location within the mobile or desktop.

10Managing Waste Storage Areas

WCATS is organized in a structured way to allow for the accurate capture of information. This structure along with the use of time-base tasks allows the system to provide inventory reports that not only represent the current inventory but can also allow for management of inventory areas with specific requirements, such as 90-day storage areas and other inventory compliance rules.

10.1 Facilities, Storage Areas & Grid Locations

WCATS has a hierarchy to represent locations. Beginning at the top level, that hierarchy is as follows:

- Company
- Facility
- Service Unit
- Grid Location

Grids can be X, Y, and Z for storage and disposal service units. Disposal units may also have a grid P defined to represent position. Currently these grids are represented independently of one another in WCATS.

10.2 Monitoring Less Than 90 Day Storage Areas

10.2.1 Less-than-90 Day Report

The Less-than-90 day report can be invoked from the 'Inventory Reports Manager'. To use it, select a service unit that begins with 'L90' followed by the site registration number.

The report displays the 'Days in Accumulation Area', which is calculated in one of two ways:

1. If container was created here, use earlier of Origin Date and Accumulation Start Date
2. If container was created in another service unit, always use Days since Accumulation Start Date

L90 INVENTORY REPORT
LANL: 03: <90 DAY AREA - BLDG: 2322, IN HIGH BAY AREA
INVENTORY DATE: 2/17/2012 10:42 am

Grid Loc (X.Y.Z)	Accum. Start	ID	Labeled ID	Waste Type	Waste Stream	Days in Unit	Volume	Gross Wt (Lbs)
<90 DAY AREA - BLDG: 2322, IN HIGH BAY AREA								
	04/22/2010	39481	10128652	HAZ	21147	666	5 gal	25.00
	02/15/2012	719949	W719949	SW-OTHER	13477	2	2 L	5.00
GRID X Subtotal -			Container Count: **2**		Volume Gals:	**5.53**	Weight lbs:	**30.00**
Unit Total - <90 DAY AREA - BLDG: 2322, IN HIGH BAY AF			Container Count: **2**		Volume Gals:	**5.53**	Weight lbs:	**30.00**

L90 Inventory Report

Note: the report is only as accurate as the data in the system, and data from previously migrated systems, such as ChemLL, may need to be cleaned up before it is reflected accurately in WCATS.

10.2.2 Less-than-90 Day Notifications

Less-than-90 day notifications are sent out to users who are members of a usergroup that is authorized on an L90 area or who subscribe to them within their own Person Profile. They fall into three types:

- 30 Day (one-time email)
- 80 Day (daily email)
- Failure (daily email).

If you receive notifications you do not wish to see, you may be authorized at a service unit at which you no longer do work. Contact Waste Help for assistance with your usergroup settings.

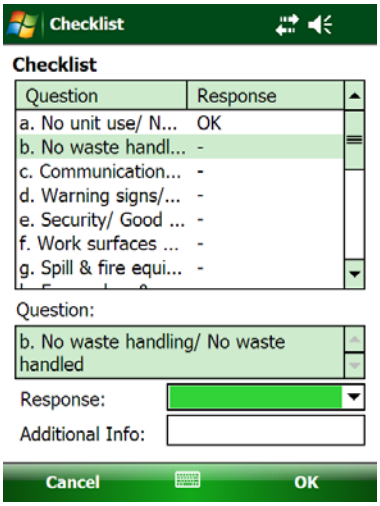
10.3 Generating Inventory Reports

Inventory Reports can be generated for Facilities or Service Units by selecting Reports > Inventory Report Manager. This tool can generate past or present reports.

10.4 Monitoring Inventory Compliance Rules

Inventory compliance rules can be seen at the appropriate level (Facility, Service Unit, or Grid Location). Each task into or out of an area that has compliance rules displays the current inventory levels as part of the task's execution. Inventory can also be monitored using the additional reports provided by the WCATS system.

10.5 Completing Facility Inspections with the Mobile Device



Facility inspections can be performed as administrative tasks on the WCATS mobile device. Simply select 'Administrative Tasks', then 'Continue'. Select the appropriate service unit that represents the review task. Only those facilities that have appropriate mobile-enabled administrative tasks may be completed on the mobile device.

Facility inspections include a checklist review, which should be completed as part of the mobile application.

10.6 Wall-to-wall Inventory

The wall-to-wall inventory mobile application can be used to perform a field check of the inventory that is present at a storage unit. It may only be used for one service unit (typically a building) at a time.

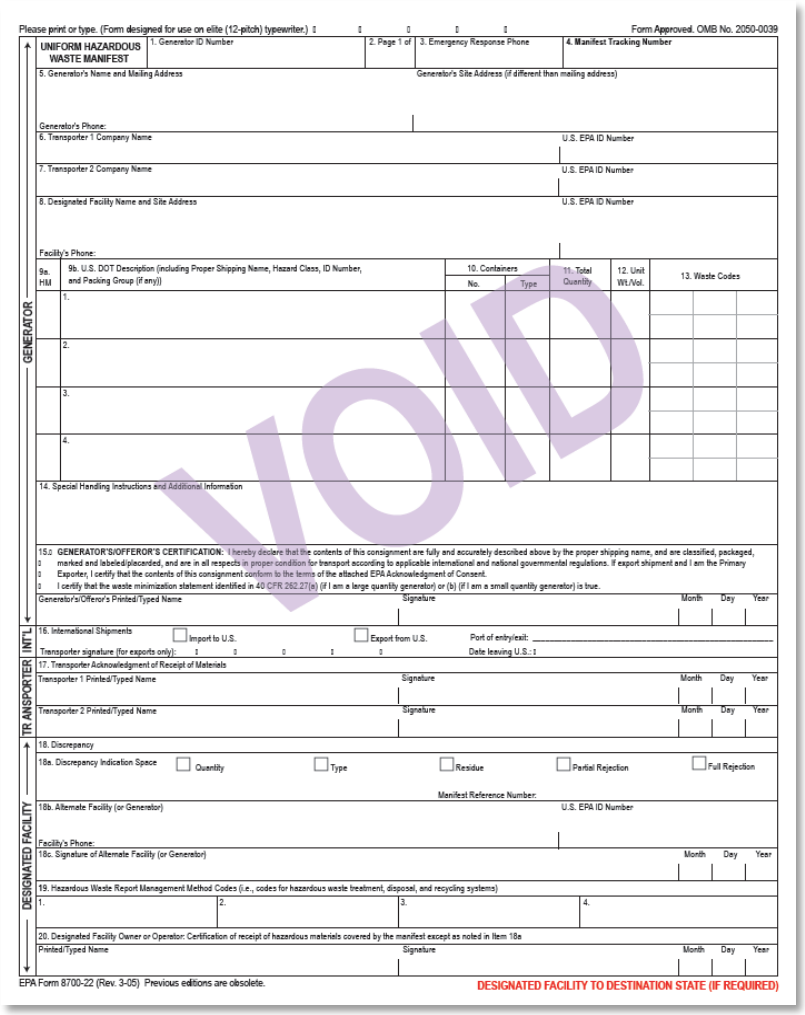
When you select a service unit, the expected inventory is shown on the 'Not Yet Scanned' tab. As you scan items, they move to the 'Scanned' tab with one of several statuses:

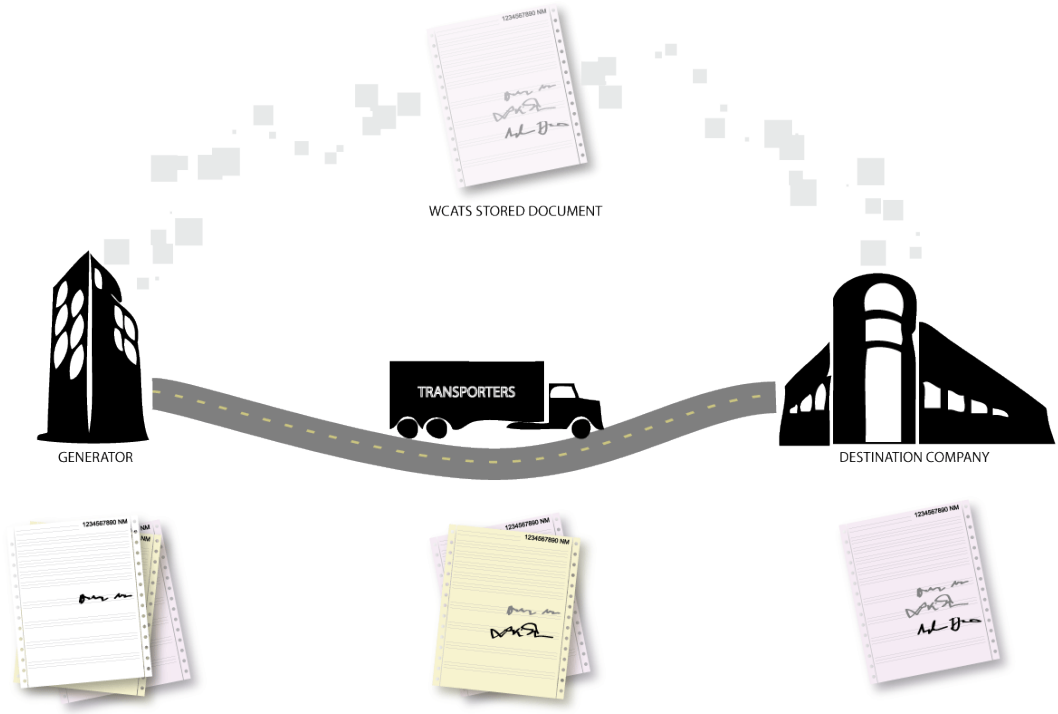
- Container is present in inventory with no changes: 'Accepted'
- Container is present in inventory with changes to room or building: Note of the changes
- Container is not present in inventory for this building: 'Rejected'

11Creating and Managing the Uniform Hazard Waste Manifest

The manifest profile subsystem provides support for defining, creating, printing, and tracking the Uniform Hazardous Waste Manifest, which is required by the EPA and DOT for the transportation of hazardous waste. The created manifest satisfies EPA's cradle-to-grave tracking requirements, which includes documenting the receipt of certificates of disposal and/or destruction.

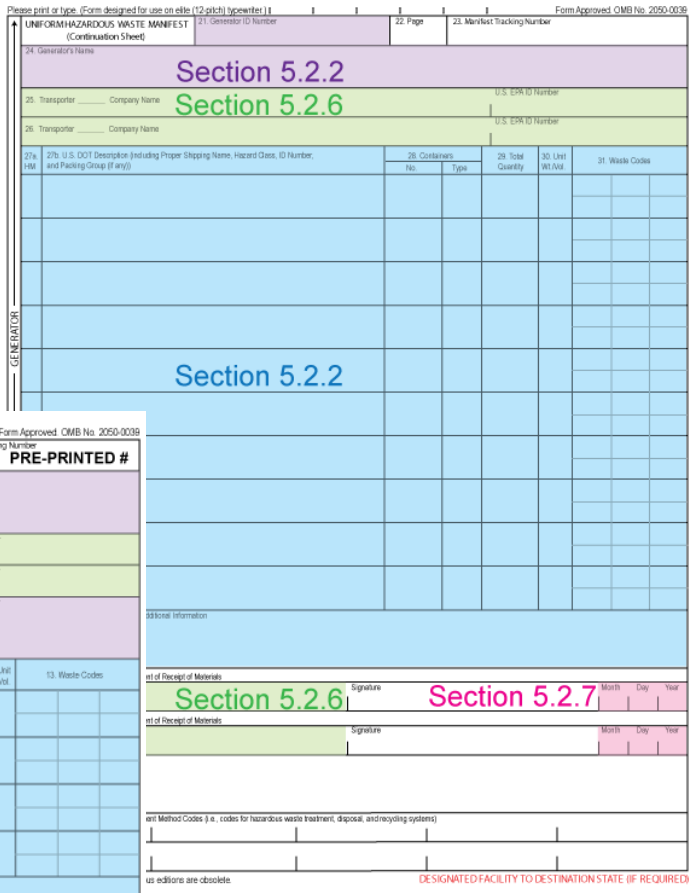
The core purpose of the manifest profile subsystem is to identify shipping tasks with containers that will be represented on the manifest, build proper shipping descriptions for those containers, and accurately format the printing of the uniform hazardous waste manifest. Tools and support are offered to generate the DOT shipping description, print the manifest on the federally mandated manifest forms, and track hazardous waste from generation to disposition.

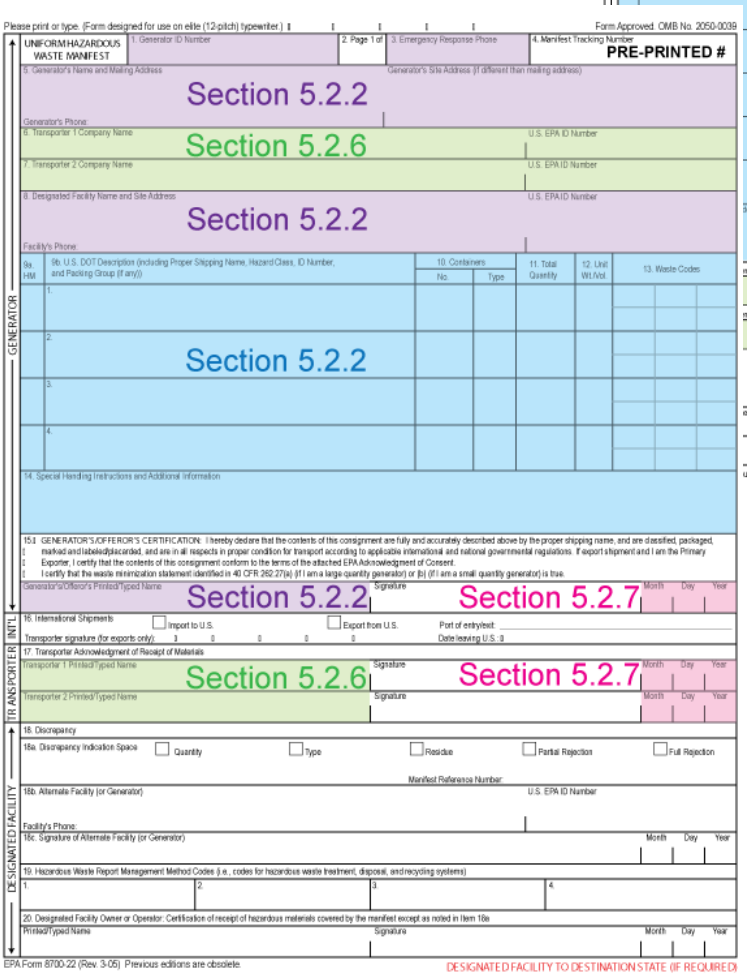




How does it work?

- A manifest is created by a waste reviewer preparing to transfer hazardous waste for treatment, recycling, storage, or disposal.
- The multi-copied form travels with the waste providing necessary information on the quantity and type of the waste being transported, instructions for handling the waste, and signature lines for all parties involved in the disposition process.
- Each involved member retains a copy for themselves after they sign off. Once the waste has reached its final destination, the final signed copy is returned to the generator; confirming receipt of the waste by the destination company.

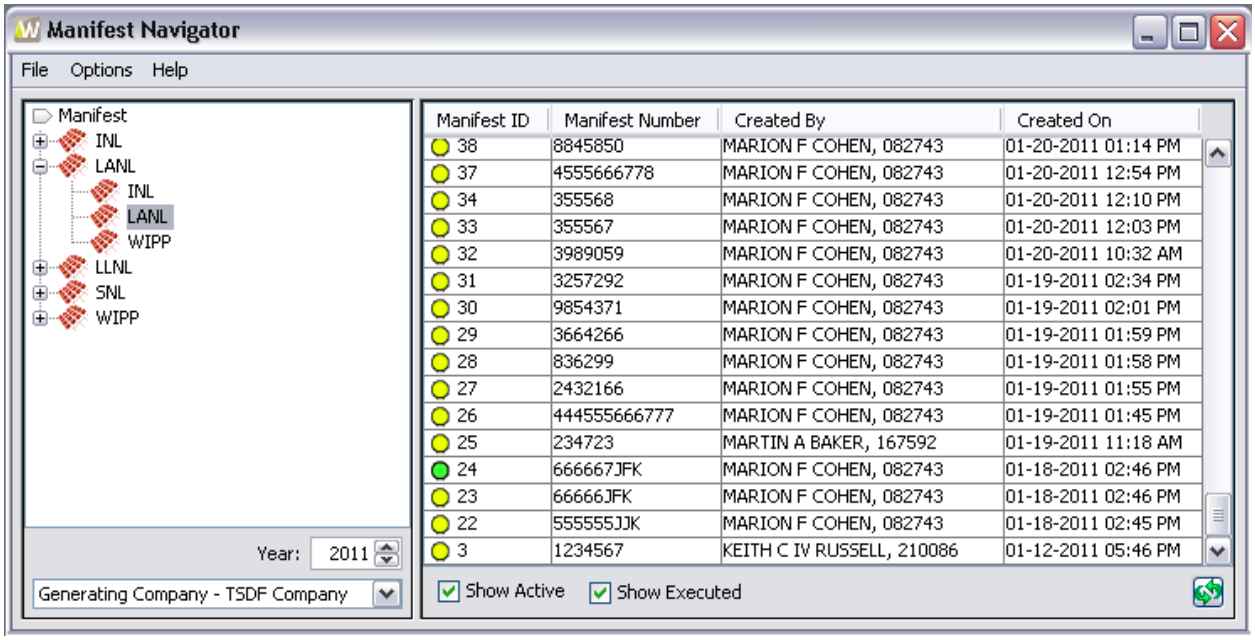

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)
Form Approved. OMB No. 2050-0039
UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)
21. Generator ID Number
22. Page
23. Manifest Tracking Number
24. Generator's Name
Section 5.2.2
25. Transporter ____ Company Name
Section 5.2.6
U.S. EPA ID Number
26. Transporter ____ Company Name
U.S. EPA ID Number
27a. HM
27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))
28. Containers
No.
Type
29. Total Quantity
30. Unit Wt./Vol.
31. Waste Codes
GENERATOR
Section 5.2.2
dditional Information
nt of Receipt of Materials
Section 5.2.6
Signature
Section 5.2.7
Month
Day
Year
nt of Receipt of Materials
Signature
Month
Day
Year
ent Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
us editions are obsolete.
DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)


Please print or type. (Form designed for use on elite (12-pitch) typewriter.)
Form Approved. OMB No. 2050-0039
UNIFORM HAZARDOUS WASTE MANIFEST
1. Generator ID Number
2. Page 1 of
3. Emergency Response Phone
4. Manifest Tracking Number
PRE-PRINTED #
5. Generator's Name and Mailing Address
Section 5.2.2
Generator's Site Address (if different than mailing address)
Generator's Phone:
6. Transporter 1 Company Name
Section 5.2.6
U.S. EPA ID Number
7. Transporter 2 Company Name
U.S. EPA ID Number
8. Designated Facility Name and Site Address
Section 5.2.2
U.S. EPA ID Number
Facility's Phone:
9a. HM
9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))
10. Containers
No.
Type
11. Total Quantity
12. Unit Wt./Vol.
13. Waste Codes
GENERATOR
1.
2.
Section 5.2.2
3.
4.
14. Special Handling Instructions and Additional Information
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.
Generator's/Offeror's Printed/Typed Name
Section 5.2.2
Signature
Section 5.2.7
Month
Day
Year
INTL
16. International Shipments
Import to U.S.
Export from U.S.
Port of entry/exit:
Transporter signature (for exports only):
Date leaving U.S.:
TRANSPORTER
17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name
Section 5.2.6
Signature
Section 5.2.7
Month
Day
Year
Transporter 2 Printed/Typed Name
Signature
Month
Day
Year
DESIGNATED FACILITY
18. Discrepancy
18a. Discrepancy Indication Space
Quantity
Type
Residue
Partial Rejection
Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month
Day
Year
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1.
2.
3.
4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name
Signature
Month
Day
Year
EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.
DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

11.1 General Concepts

11.1.1 Utilizing the Manifest Navigator

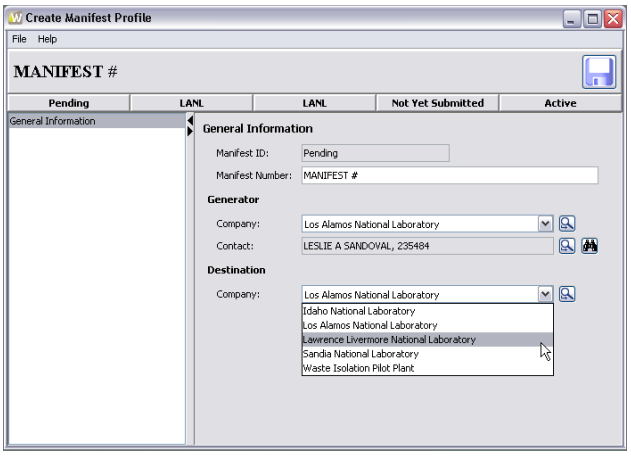
The manifest navigator form is shown below. The navigator form contains the complete record of all manifests created in the application. From this form, a user can either select an existing manifest profile to view and/or modify or they can create a new manifest.



11.2 Creating a New Manifest

To create a new manifest profile, perform the following tasks:

1. Within the main WCATS application screen, select File > New > Manifest. The 'Create Manifest Profile' form appears.



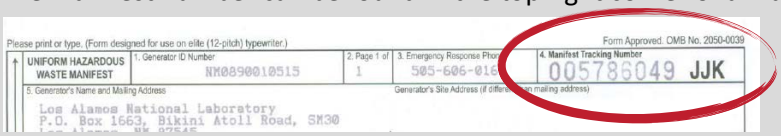
To enter general information to a newly created manifest profile, perform the following tasks:

2. In the manifest number field, enter a manifest tracking number.

Note:

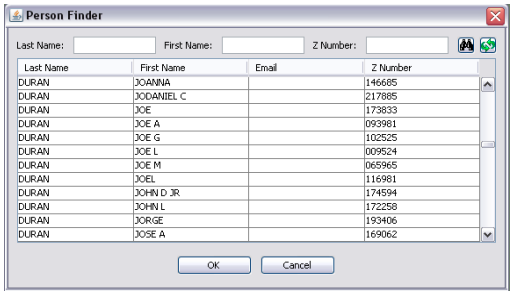
- An actual unique number should always be used.
- A typical manifest tracking number will contain only 12 alphanumeric characters.

- The manifest number can be found in the top right corner of a manifest.



3. From the drop down list provided in the generator company field, select the generator company for your shipment.
4. In the generator contact section, select a contact by clicking on the search button to deploy the person finder form.

Note: As a user logged on to the WCATS application, your workstation should automatically enter your information into the contact field.



5. Inside the person finder form (see Figure 4-2) enter the contact's last name, first name, and/or Z number into the related fields and click the search button.

Note: To clear all fields, click the refresh button located next to the search button.

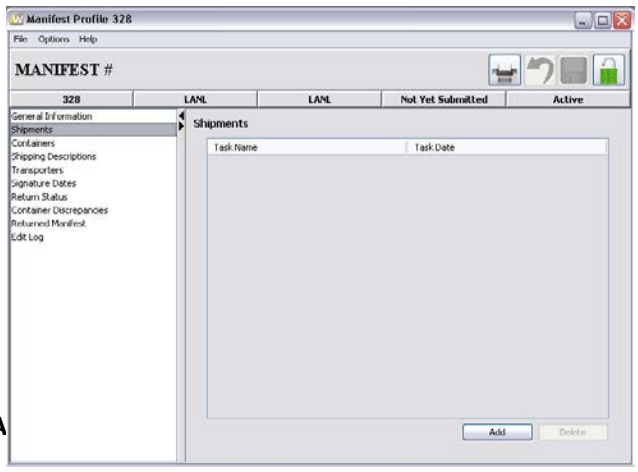
6. Once the data has been entered, click the search button to load all available contact options.
7. Once a contact has been selected, click the ok button to enter the data into proper field.
8. From the drop down provided in the destination company field, select a destination for your shipment.
9. Click the save button on the toolbar to set the general information portion.

Note:

- The manifest ID is produced automatically by the application and can be seen upon saving.
- To view more details on any of the items in the profile panel, click on the view button represented as a magnifying glass next to the item to deploy the corresponding profile form.

11.2.1 Adding Shipments to a Manifest

Note: Before you begin, you will need knowledge on existing shipping tasks and the containers which are included in those tasks.



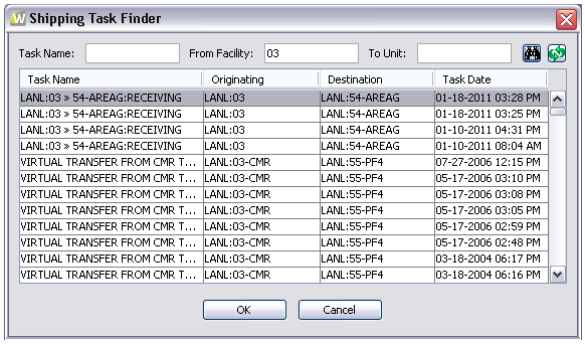
To add shipments to a manifest perform the following tasks:

1. Within the manifest profile form, click on shipments in the navigation panel to deploy the shipments profile panel.
2. In the shipments profile panel, click the add button to deploy the shipping task finder form.
3. Inside the shipping task finder form, you can enter the task name, from facility, and/or to unit into the related fields.

   Note: To clear all fields, click the refresh button located next to the search button.

4. Once data is entered, click the search button to load all available shipping tasks.

   Note: If the task you are looking for is not listed, verify that the task has completed all necessary processes and is ready for manifesting.



5. Once a task has been selected, click the ok button to place the data into the shipments profile panel.

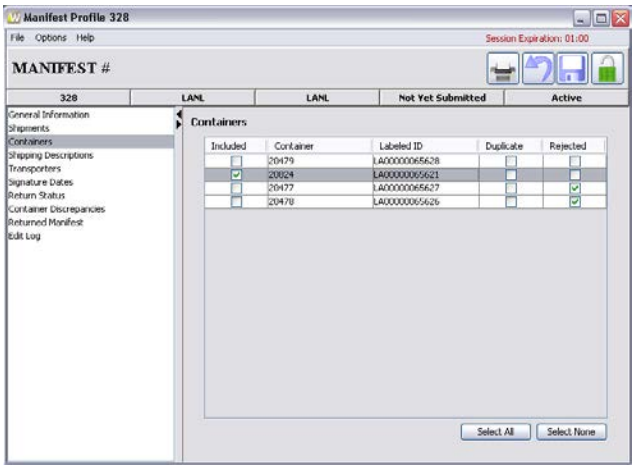
   Note:

   - Duplicate shipping tasks are not allowed. An error message will prompt when attempted.
   - To delete a shipping task from the manifest profile, select the desired task and click the delete button.
   - To view the shipping task profile for any of the selected tasks, double click on the desired task.

6. Click the save button on the toolbar to set the shipment information.

11.2.2 Adding Containers to a Manifest

Shipments contain a variety of containers. If a container is not hazardous and does not require manifesting, users now have the ability to not include those containers. By offering an include option on the containers profile panel, users can now decide which containers to manifest.



NOTE: Before you begin, you will need knowledge on existing containers included in previously attached shipping tasks.

To include containers of waste in a manifest, perform the following tasks:

1. Within the manifest profile form, click on containers in the navigation panel to deploy the containers profile panel.
2. Within the containers table provided, select the container(s) you wish to include by checking the corresponding check box.

   Note:

   - Only containers that have previously been added to the attached shipping tasks will be displayed for selection.
   - If a container has been duplicated and/or rejected within the shipping task, the corresponding checkbox will be checked.
   - For convenience, a select all button is provided to select all available containers and a select none button is provided to deselect all selected containers.
   - To view more details on any of the containers, double click on the desired container.
3. Once the containers you wish to include in the manifest have been selected, click the save button on the toolbar to set the containers information in the manifest.

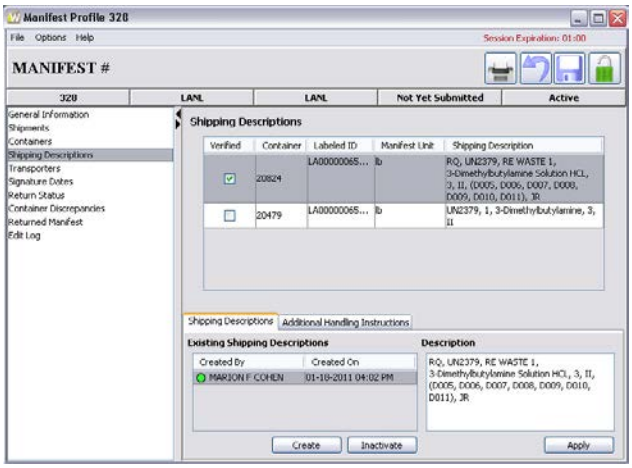
11.2.3 Entering Shipping Descriptions for a Container

A shipping description builder tool is provided to help prepare and format the required shipping descriptions for each item on the manifest form. The shipping description builder tool has been designed to be used by a trained shipper that holds the necessary knowledge to correctly address the necessary data for shipping hazardous waste.

Since containers may be shipped more than once, users have the option to either use an existing shipping description built for a previous shipment, or create a new shipping description.

Note: Before you begin, you will need knowledge of the following:

- DOT shipping description requirements.
- Contents of all containers.
- Hazardous aspects of all containers.(e.g., nuclide information)



To select a shipping description for a container, perform the following tasks:

1. Within the manifest profile form, click on shipping descriptions in the navigation panel to deploy the shipping descriptions profile panel.

2. From the shipping descriptions profile panel, select the container which you would like to add/edit a shipping description.

Note:

- Only containers that have been included in the manifest will be displayed.
- The shipping description profile panel is organized by container name, labeled ID, manifest unit, and shipping description detail.

3. If there are available existing shipping descriptions within the shipping description tab, select from the available descriptions. If there are no available existing descriptions or you would like to create a new description, continue on to step 6.

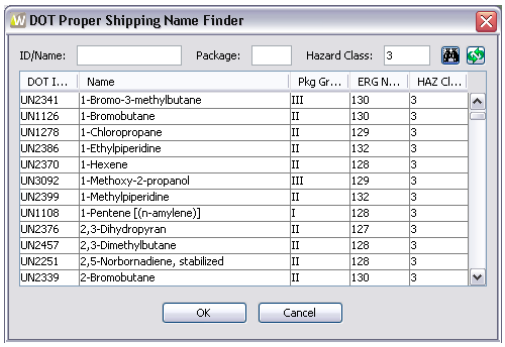
Note:

- Existing shipping descriptions are labeled by their creator's name and the date of creation
- When an existing shipping description is selected the details of that description are visible in the description box to the right.

4. Once a past shipping description has been selected, click the apply button to apply the description to the selected container.
5. Once the shipping description has been applied, click the save button on the toolbar to set the shipping description information in the manifest.

Note: The activation status of past shipping descriptions is displayed by a red (inactive) or green (active) dot to the left side of the creator's name. To activate/inactivate a shipping description, select the description you wish to activate/inactivate and click the activate/inactivate button.

6. To create a new shipping description, click the create button to deploy the shipping description builder form.
7. Within the shipping description builder, select a proper shipping name by clicking on the search button to deploy the DOE proper shipping name finder.
8. Inside the name finder form, you can enter the ID/name, package group, and/or hazard class into the related fields.



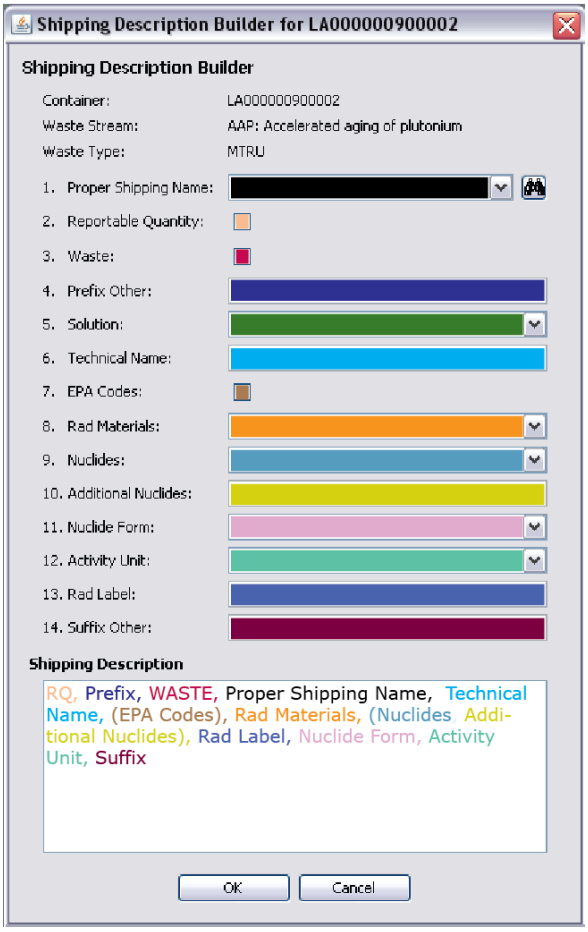
Note: To clear all fields, click the refresh button located next to the search button.

9. Once data is entered, click the search button to load all available names.

Note: DOT proper shipping names are derived and can be found in 49 CFR Part 172 Hazardous Materials Table.

10. Once a name has been selected, click the ok button to place the data into the shipping description builder form.

Note: Users can also select from a list of previously used proper shipping names from the drop down list provided.



11. If the container includes reportable quantities, click/check the reportable quantity check box.
12. If the container includes waste, click/check the waste check box.
13. To add a prefix to the shipping description, enter text into the field provided.
14. To characterize the container, select solution or mixture from the drop down list provided.
15. To provide the container with a technical name, enter text into the field provided.
16. If desired, check the EPA codes check box to display all EPA codes included in a container.
17. If the container includes radioactive materials, select the ALSO CONTAINS RADIOACTIVE MATERIALS option from the drop down list provided.
18. If you would like to include radio nuclide information in your shipping description, select from either displaying the 95% risk nuclides or all nuclides from the drop down list provided.
19. If a container has additional nuclides not displayed that you would like to include, enter the additional nuclides in the field provided.
20. If the container includes nuclides, you can characterize the form of the nuclides by selecting either solid elemental, solid oxide, liquid elemental, or liquid oxide from the drop down list provided.
21. To include a container's nuclide activity by unit select either curie (Ci) or Terabecquerel (TBq) from the drop down list provided.
22. To provide the container with a radioactive label, enter text in the field provided.
23. To add a suffix to the shipping description, enter text into the field provided.

Note:

- If any of the provided fields are not applicable to the container being described, the field can either be left blank or the N/A option can be selected.
- Notice that all information entered is displayed in the shipping description viewing box on the bottom of the form.

24. Once all available information is entered, click the ok button to set the shipping description information.

Note: The shipping description is now active and assigned to the selected container.

25. Click the save button on the toolbar to set the shipping description information in the manifest.

11.2.3.1 Adding Additional Handling Instructions

Some containers require extra instructions as to handling. A section in the shipping descriptions profile panel allows users to document any additional information necessary to help in the shipping of their waste.

To add additional handling instruction for any of the included containers in the manifest, perform the following tasks:

1. Within the shipping descriptions profile panel, select the container which you would like to enter addition handling instructions for.
2. Select the additional handling instructions tab from the tabs provided.
3. Enter any additional handling instructions in the text field provided.

Note: Because line space is limited, users need be as concise as possible. Additional handling instructions must be less than 200 characters in length.

4. Once the additional handling instructions have been entered, click the save button on the toolbar to set the shipping description information in the manifest.

11.2.4 Verifying Shipping Descriptions

Manifests can include a large number of containers, each requiring individual shipping descriptions. As a convenience to the user, a verify option is provided. The option to verify has been placed next to each container in the shipping descriptions profile panel to act as a marker of an acceptable and prepared shipping description. Users can review and verify their shipping descriptions or have a co-worker review and verify the description for accuracy and completeness. A description must be verified before it is saved to the manifest.

To verify shipping descriptions for any of the included containers in manifest, perform the following tasks:

Note: A container must be verified, to be included in the manifest.

1. Within the shipping descriptions profile panel, select the container which you would like to verify the shipping description.

Note: To reopen and unlock a previously created profile, see sections 5.2.10.

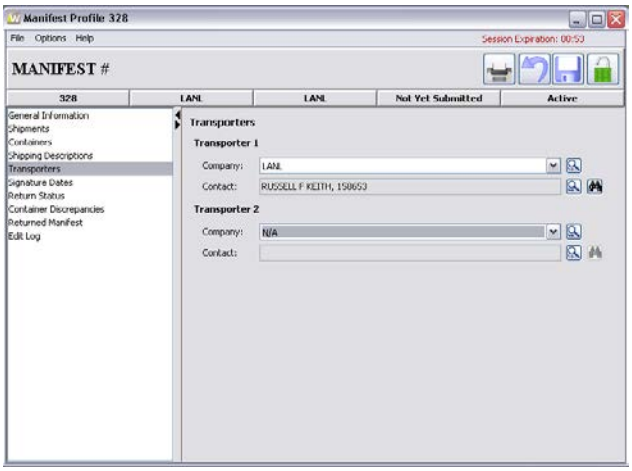
2. After reviewing the selected shipping description, check the corresponding verified checkbox.

Note: When verifying a container's shipping description, users also have the ability to select, from the drop down list provided, the unit of weight that will be displayed for each individual container on the manifest.

3. Once all shipping descriptions have been verified, click the save button on the toolbar to set the shipping description information in the manifest.

11.2.5 Specifying Transporters in a Manifest

Users are able to specify up to two transporters to be included in the manifest. To specify transports, perform the following steps:



1. Within the manifest profile form, click on transporters in the navigation panel to deploy the transporters profile panel.
2. In the transporter 1 section, select a transporter company from the drop down list provided.
3. In the transporter 1 section, select a contact by clicking on the search button to deploy the person finder form.
4. Inside the person finder form enter the contact's last name, first name, and/or Z number into the related fields and click the search button.

Note: To clear all fields, click the refresh button located next to the search button.

5. Once the data has been entered, click the search button to load all available contact options.

Note: If the person you are looking for is not listed, a new person profile can be created using the administrative forms subsystem.

6. Once a contact has been selected, click the ok button to enter the data into proper field.
7. Repeat the same process for adding a second transporter in the transporter 2 section.
8. Click the save button on the toolbar to set the transporters information in the manifest.

Note: To view more details on any of the items in the profile panel, click on the view button represented as a magnifying glass next to the item to deploy the corresponding profile form.

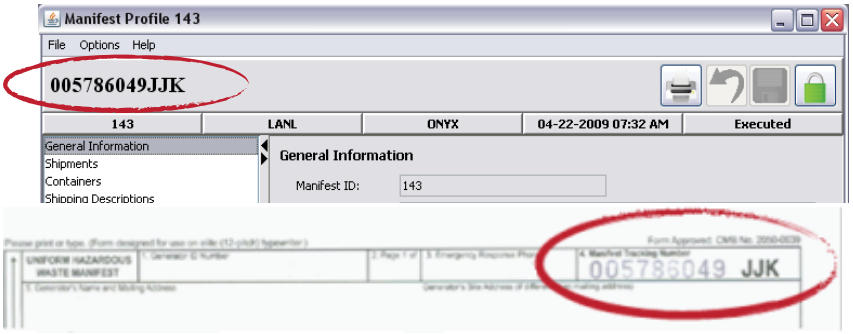
11.2.6 Printing the Manifest and Profile Report

11.2.6.1 Printing the Manifest

After a manifest is created in the WCATS application it must be printed on a 12-pitch, EPA mandated uniform hazardous waste manifest form. It is recommended that the OKI Pacemaker 4410 be used for manifest printing through the WCATS application.

To print the completed manifest, perform the following tasks:

Note: First and foremost, before printing, assure that the manifest number recorded in the application corresponds with the pre-printed manifest number located in the top right hand corner of the loaded manifest form.



1. Within the manifest profile form, click options │ print manifest for a print dialogue box to appear.
2. Select a printer from the drop down list provided.
3. Select the number of copies you desire from the drop down list provided.
4. Click print to send the manifest to the local form printer selected by the WCATS application.

11.2.6.2 Printing the Manifest Profile Report

To print the manifest profile report from any of the profile panels within the manifest profile, perform the following tasks:

1. Within the manifest profile, click the print button on the toolbar to display the manifest profile report.
2. Click on the print icon in the top left corner of the screen to deploy the printer selection screen.
3. Click ok to print the document.

Note: The manifest profile report can also be exported as an electronic copy by clicking the export button next to the print button on the manifest profile report screen. By selecting the export format, page range, and location from the provided export form, a user can keep an electronic copy of the manifest profile report locally on their machine.

11.3 Managing a Manifest

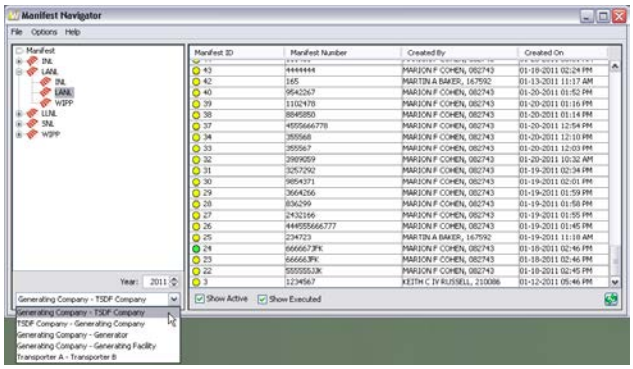
Once a manifest is created in the system, it must be properly managed to ensure successful documentation. Users are able to clearly document status changes, actions taken, or receipt documents for any manifest.

11.3.1 Finding an Existing Manifest

Once a manifest has been created, it is stored in the manifest navigator with the potential to be reopened and edited at any given time before execution. Within the manifest navigator, a user can locate and reopen any manifest in a variety of ways. If the user knows the generator and destination companies, they are able to locate the manifest though the navigation panel in the manifest navigator. If the user knows the manifest ID or the manifest number, they are able to refine their search in the options choice of the menu bar.

To reopen an existing manifest using the navigation panel in the manifest navigator, perform the following tasks:

1. Within the manifest navigator's navigation panel, double click the desired generating company to expand the navigation tree.
2. Once expanded, select a TSDF company to display all available manifests in the navigator's profile panel.



Note: Notice there are many viewing options within the manifest navigator.

The navigation panel, on the left side of the navigator, is organized according to the specific search path selected in the drop down list in the lower left corner of the navigator.

The search path is automatically set to 'Generating Company - TSDF Company'.
Search paths include:

- 'Generating Company - TSDF Company'
- 'TSDF Company - Generating Company'
- 'Generating Company - Generator'
- 'Generating Company - Generating Facility', and
- 'Transporter A - Transporter B'.

Manifests are also separated by year. To select the year, click on the up/down arrows provided in the year field.

Within the manifest navigator, manifests are organized by ID, pre-printed number, created by person, and created on date.

Manifest status is identified by a colored icon to the left of the manifest ID. A green dot identifies an executed manifest and yellow represents an active manifest.

To view manifests by status, check the desired active, and/or executed box below the table.

Menu options for the manifest navigator include file, options, and help.

To refresh the list of visible manifests within the navigator, click the refresh button in the lower right corner.

3. When the desired manifest has been located, double click on the corresponding row to deploy the manifest profile.

To reopen an existing manifest in the manifest navigator using a manifest ID, perform the following tasks:

1. Within the manifest navigator, click options│ find manifest │by manifest ID for an input box to appear.
2. Enter the manifest ID in the field provided and click ok.

Note: A list will be populated in the profile panel of the manifest navigator with the desired manifest ID highlighted for selection.

3. Double click on the row of the selected manifest ID to deploy the manifest profile.

To reopen an existing manifest in the manifest navigator using a manifest number, perform the following task:

1. Within the manifest navigator, click options│ find manifest │ by manifest number for an input box to appear.
2. Enter the manifest number in the field provided and click ok.

Note: A list will be populated in the profile panel of the manifest navigator with the desired manifest ID highlighted for selection.

3. Double click on the row of the selected manifest number to deploy the manifest profile.

11.3.2 Unlocking an Existing Manifest Profile

Once a manifest profile has been created, it can be reopened and unlocked for editing at any time prior to being executed. To unlock the manifest profile, perform the following tasks:

1. Within an opened manifest profile, click on the red lock button in the upper right corner.
2. In the input request dialog box, enter a valid reason for requesting authority to alter the profile.

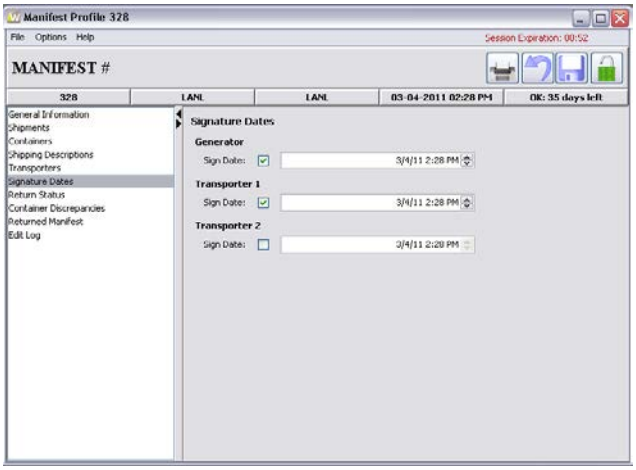
3. Click ok to submit the request and unlock the profile.

Note:

- If access has been authorized, the lock icon will now be seen as a green open lock and all editable attributes will be enabled.
- If access has been denied, an error message will appear stating the user is not authorized to edit the open profile. If access has been denied, contact Waste Help for more information at 5-2494 or at wastehelp@lanl.gov.

11.3.3 Entering Signature Dates into a Manifest

Users have the ability to document signature dates for generators and transporters. Signature dates are not only stored within the system, but they are also preprinted for convenience on the EPA uniform hazardous waste manifest awaiting signatures. To set the signature dates on the manifest, perform the following tasks:



1. Within the manifest profile form, click on signature dates.
2. First activate the date for preprinting by checking the corresponding sign date checkbox.

Note: If a date is not activated or checked, it will not be printed on the manifest.

3. Within the activated signature section, set the date and time by highlighting the element you wish to edit and clicking on the up and down arrows provided or by using the arrow keys on your keyboard.

Note: You can also enter the information by simply typing in the text in the given format.

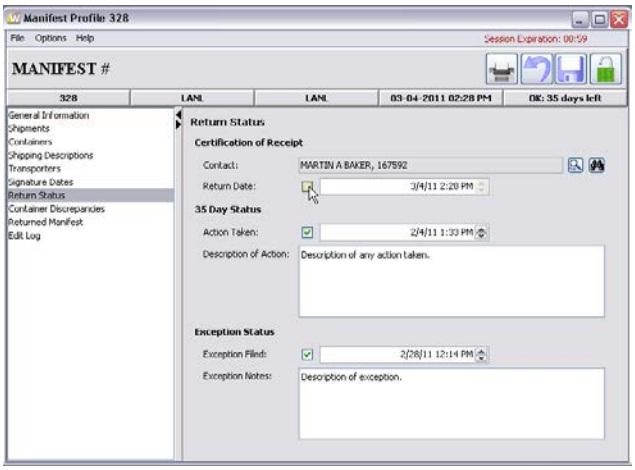
4. Once the signature date and times have been set, click the save button on the toolbar to set the signature information in the manifest.

Note:

- The manifest remains active until the generator signature date is set. Once the generator signature date is set, the 35 day countdown begins. (see section 11.3.1)
- Notice, the 35 day countdown is calculated from the date entered.
- Once any of the signature dates have been set, the shipments and containers profile pages can no longer be modified. To modify the shipments and containers profile pages, all signature dates must be removed and unchecked to return the manifest to the active status.
- If any of the signature dates are altered outside of the application (e.g., written in), remember to update the application as well to ensure proper documentation.

11.3.4 Managing a Manifest's Status

A manifest status is shown in the last two columns of the header bar in the manifest profile. Throughout the manifesting process the last column displays whether the manifest is active, executed, or inactive, and the second to last displays the 35 day status. The EPA allocates a 35 day period for the storing of waste after generation, giving the user a 35 day period to create and execute a manifest. The manifest remains active until the generator signature date is set. Once the date has been set, the 35 day count-down begins for the manifest to be returned. When a return date is entered into the system, the manifest is then considered executed.



To enter the return status information, perform the following tasks:

1. Within the manifest profile form, click on return status in the navigation panel to deploy the return status profile panel.

   Note: To reopen and unlock a previously created profile, see sections 5.2.10.

2. To select a contact for the certification of receipt, click on the search button to deploy the person finder form.
3. Inside the person finder form enter the contact's last name, first name, and/or Z number into the related fields and click the search button.

   Note: To clear all fields, click the refresh button located next to the search button.

4. Once the data has been entered, click the search button to load all available contact options.

   Note: If the person you are looking for is not listed, a new person profile can be created with assistance from the Waste Help team.

5. Once a contact has been selected, click the ok button to enter the data into proper field.

   Note: To view more details on the contact, click on the view button represented as a magnifying glass next to the item to deploy the person profile form.

6. To enter a return date, first activate the date field by checking the corresponding checkbox.

   Note:

   - Once the date field is checked, the manifest status will show as executed.
   - If the date field is not checked, the certification of receipt information will not be entered into the manifest.

7. Once the date field has been activated, set the date and time by highlighting the element you wish to edit and clicking on the up and down arrows provided or by using the arrow keys on your keyboard.

   Note: You can also enter the information by simply typing in the text in the given format.

8. Once the date is set, click the save button on the toolbar to set the certification of return information in the manifest.

If the process exceeds the 35 day period and has not been executed, users are able to document any actions taken, as well as any exceptions. To enter an action taken, perform the following tasks:

1. Within the return status profile panel, first activate the date field by checking the corresponding checkbox.

   Note:

   - To reopen and unlock a previously created profile, see sections 5.2.10.
   - If the date field is not checked, the action information will not be entered into the manifest.

2. Once the date field has been activated, set the date and time by highlighting the element you wish to edit and clicking on the up and down arrows provided or by using the arrow keys on your keyboard.

   Note: You can also enter the information by simply typing in the text in the given format.

3. Once the date is set, describe the action taken by entering text in the field provided.
4. Once complete, click the save button on the toolbar to set the action taken information in the manifest.

Users also have the ability to document any exceptions to the manifest. To enter an exception note, perform the following tasks:

1. Within the return status profile panel, first activate the date field by checking the corresponding checkbox. See

   Note:

   - To reopen and unlock a previously created profile, see sections 5.2.10.
   - If the date field is not checked, the exception information will not be entered into the manifest.

2. Once the date field has been activated, set the date and time by highlighting the element you wish to edit and clicking on the up and down arrows provided or by using the arrow keys on your keyboard.

   Note: You can also enter the information by simply typing in the text in the given format.

3. Once the date is set, note the exception by entering text in the field provided.
4. Once complete, click the save button on the toolbar to set the exception information in the manifest.

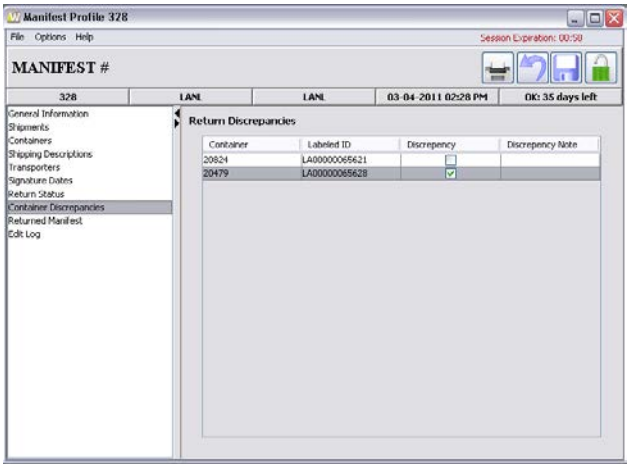
A manifest can also be cancelled. To cancel the manifest, perform the following task:

1. Within the opened manifest profile, click options │change status │cancel.

NOTE: If a manifest is cancelled, it can also be made activate once again by completing the above steps and selecting active.

11.3.5 Entering Container Discrepancies

When the manifest has been returned from the destination company, they might have included container discrepancies that need to be documented. Users are able to do so in the application by performing the following tasks:



5. Within the manifest profile form, click on container discrepancies in the navigation panel to deploy the return discrepancies profile panel.
6. Within the return discrepancies profile panel, identify the container that the discrepancies pertain to by checking the corresponding check box.
7. To enter a note regarding the found discrepancies, double click in the corresponding row under the discrepancy note column to enter text.
8. Repeat for all other applicable containers.
9. Click the save button to set the container discrepancy information into the manifest profile.

Note: Container discrepancies cannot be entered into the system until the manifest profile has been completely executed.

11.3.6 Storing Reference Documents

Users are able to document the manifesting process by storing valuable reference documents within the manifest profile.

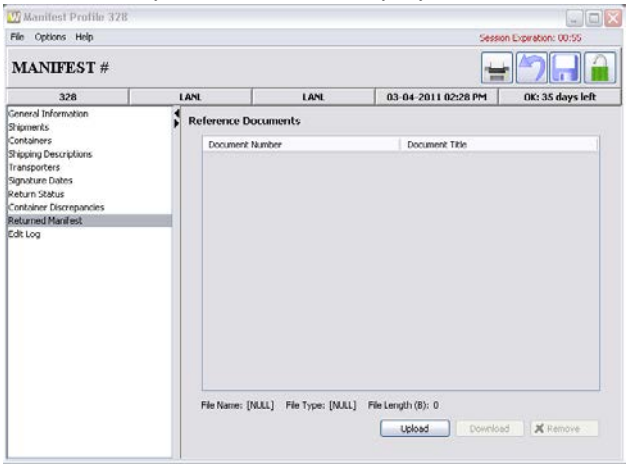
The most important reference document required is the returned manifest. After the manifest has been executed and the shipment has made its journey to the disposal site, the last contact involved must return the signed, completed copy of the manifest for documentation. Other documents that can be stored for documentation include certificates of destruction and/or disposal. From within the application, a user can upload any of these documents for storage, as well as view any of the uploaded documents stored.

To upload a document to be stored, perform the following tasks:

1. Within the manifest profile form, click on '*Returned Manifest'* in the navigation panel to deploy the reference documents profile panel.

Note: To reopen and unlock a previously created profile, see sections 5.2.10.

2. Within the reference documents profile panel, click the upload button to display the document classification warning.



3. Carefully read the document classification warning and click yes to continue.

Note:

- Any document uploaded into the WCATS application must be certified as unclassified and must have the appropriate authorized derivative classification (ADC) review performed.

Once the document has been certified, an *'open file'* dialog box appears for selecting a file.

4. Select the file you wish to upload and click open. A new row appears with the attached document information provided.

Note:

- The maximum file size supported is 10 MB.
- Supported file formats include: doc, docx, pdf, xls, ppt, and many more.

5. Click the save button to save the attached document within the manifest profile.

Note:

- Notice, file name, type and length for the selected document are displayed below the documentation table.
- To download a previously uploaded file, select the desired document from the documentation table and click the download button.
- To delete an uploaded document from the documentation table, select the desired document and click the remove button.

12Creating and Maintaining Equipment

The equipment subsystem provides support for a wide range of equipment used in waste operations. Users can define a piece of equipment, establish maintenance and calibration requirements, set up notifications when necessary, and document any event or actions taken. The five main areas in which the equipment system provides support are calibration, inspection, maintenance, solution expirations, and scale checks. The overall goal of the equipment subsystem is to assist users in the tracking of equipment maintenance.

When maintaining equipment, two individuals are considered; the equipment owner and the equipment coordinator. The owner is considered the individual who is responsible for the equipment in the workplace whereas the coordinator is responsible for the tracking and documentation of the equipment and its maintenance.

12.1 General Concepts

12.1.1 Equipment Navigator

The equipment navigator contains records of all equipment entered into WCATS. From the navigator, users can either create a new profile or view an existing profile for any piece of equipment. Equipment is organized by equipment ID, equipment name, group association, workplace owner, and active status. In the navigation panel, the user can choose to search through equipment organized by various search paths. The search paths available include such options as viewing equipment by user group and owner, owner and equipment type, or technical area and equipment type.

To display the equipment navigator, click the equipment icon on the toolbar of the main application page. The Equipment Navigator screen opens.

12.2 Creating a New Equipment Profile

To create a new equipment profile, perform the following steps:

1. Click the Equipment icon in the button bar at the top of the main application page.
2. Go to File and select New Equipment. The Create Equipment Profile screen opens.

   Note: The header bar, located just below the tool bar, shows the equipment profile's status. It will be pending until the general information has been entered and saved.
3. Enter an equipment name (e.g., large torque wrench).
4. Enter the following from the appropriate fields' drop-down list:
   - Equipment type

- Equipment group
- Manufacturer
- Model number

5. To select an owner, click the search icon. The Person Finder screen opens.

   Note:

   - On the person finder screen you can enter the contact's last name, first name, and/or Z number into the related fields.
   - To clear all fields, click the refresh icon next to the Search icon.
   - If the person you are looking for is not listed, a new person profile can be created in the administration subsystem. See section 2.1.

6. Enter your search criteria, then click the Search icon to display search results.
7. Select the contact you want from the list and click the OK button to enter the data in the Owner field in the General Information profile panel.

   Note: To view more details on an eligible item in a profile panel, click the view icon next to the item, which deploys the corresponding profile screen. (Eligible items have the View icon next to them.)

8. Select a technical area from the drop-down list for the equipment's TA location.
9. Select a building from the building location drop-down list.
10. Enter a room and/or sub-room in the fields provided, if applicable, for the equipment's location (e.g., PF-4, Glovebox 402).

    Note: The equipment ID is pending until the new record has been saved.

11. Click the Save icon on the toolbar to create the new equipment profile. The Equipment Creation Successful dialog box opens.
12. Click the OK button to view your newly created equipment profile.

    Note: Once the equipment profile has been saved, the general information can no longer be edited.

13. Select Property Information in the navigation panel. The property information profile panel opens on the right.

    Note: Many pieces of equipment are entered into the system with the same criteria, therefore making it harder to distinguish between pieces. By identifying equipment property information, users can rapidly locate the piece of equipment they need.

14. Enter a serial number, property number, internal file number, external file number, and legacy ID in the corresponding fields provided.
15. Click the Save icon to set the property information in the equipment profile.

    Note: Once the equipment has been fully identified, it can be associated with a system. A system is a grouping of equipment needed to complete a task. For example, if one wanted to complete a task such as repackaging waste, they might need a torque wrench, a scale, and a

ventilation system. By placing these pieces of equipment into a single system labeled Repacking Waste, the user can view and maintain all the equipment for that task together, rather than one at a time.

16. Add equipment to an existing equipment system.
    a. Select System Information in the navigation panel. The System Information profile panel opens to the right.
    b. Enter a serial number, property number, internal file number, external file number, and legacy ID in the corresponding fields provided.

Note: Equipment can only be added to an existing equipment system. A new equipment system must be created in the administrative subsystem using Administrative Forms.

    c. Click the Save icon to set the system information in the equipment profile.

Note: The process of maintaining equipment has two important aspects to document; the service requirements and the service events. Service requirements are established so that a user can prepare for a service event. A service event is the activity spelled out in the service document. For example, an established service requirement for a torque wrench might be a calibration set for 1 hour. The service event would be the actual documented event of the calibration and the outcome.

17. Select Service Requirements in the navigation panel. The Service Requirements profile panel opens to the right.
18. Click the Create New button under the Service Requirements field. The New Service Requirement screen opens.

Note: Notice the Create New button for service events is disabled. A service requirement must be created before an event can happen.

    a. Select a requirement type from the drop-down list: calibration, inspection, or maintenance.
    b. Select an agency or organization that will perform the said service event from the drop-down list (e.g., LANL calibrations and standards lab).
    c. Select an effective date by highlighting any of the elements of the date field and using the up and down arrows provided.
    d. Enter a requirement interval in the field provided and select an interval unit from the drop-down list (e.g., 4 hours or 21 days).
    e. Enter a requirement description to give more information for the event director (e.g., calibrate torque wrench).
    f. Click the OK button to create the new service requirement. The Equipment Profile screen shows the service requirement in the Service Requirement panel.

Note:

- To view details on any of the service requirements displayed, select the requirement and click the View Details button under the Service Requirements field or double-click the desired requirement.

- Service requirements are organized in the profile panel by type, effective date, interval, interval unit, expiration date, and status.
- If a service requirement no longer applies to a piece of equipment, the status can be altered by simply clicking the Inactivate button under the Service Requirements field.
- Once a requirement is selected, the Create New button corresponding with the service events field is enabled.

19. Create a new service event.
    a. Click the specific service requirement you wish to create a service event for.
    b. Click the Create New button underneath the Service Events field. The Create Service Event screen opens.

Note: Notice the service requirement details visible in the top portion of the screen.

    c. Select an event date by highlighting any of the elements of the date field and using the up and down arrows provided.
    d. If the event is successful, check the box next to successful. If the event was not successful, leave the check box blank.

Note: Outcomes of service events are either considered successful or unsuccessful. If an event is recorded unsuccessful, the equipment becomes expired until another event is performed with a successful outcome.

    e. Enter comments into the field provided to give more details on the event.
    f. Click the OK button to create the new service event.

Note:

- Service events are organized in the profile panel by end result, event executor, and execution time of event.
- To view details on any of the service events displayed, select the event and click the View Details button under the Service Events field or double-click the desired event.

    g. Click the Save icon to set the service requirements and events information in the equipment profile.

20. Add a comment.

Note: Additional comments can be documented in the comment log for any piece of equipment to be included in an equipment report. To add comments to the comment log, perform the following tasks:

    a. Click Comment Log in the navigation panel. The Comment Log panel opens.
    b. Click the Add button in the bottom right corner of the panel. The New Equipment Comment screen opens.

c. Type the comments you wish to enter for the equipment (e.g., torque wrench will need to be replaced soon).

d. Click the OK button to set the comments in the comment log.

e. Click the Save icon to save the comments to the Equipment profile.

21. View the edit log for any equipment profile.

Note: The application keeps a log of all edits made to any equipment profile created. To view the edit log, perform the following steps:

a. Click Edit Log in the navigation panel of the Equipment Profile screen. The Edit Log panel opens.

b. Click the check boxes at the bottom of the panel to show only edit records or quality records.

Note:

- Notice the edit log is organized by edit time and edit information provided by the editor.
- To view all edit records, check on the Show All Edit Records option.
- To view all quality records, check on the Show All Quality Records option.
- The edit log is permanent and not editable.

12.3 Managing Equipment Profiles

12.3.1 Opening an Existing Equipment Profile

Once an equipment profile has been created, it is stored in the equipment navigator and it can be reopened and edited at any given time. Within the equipment navigator, a user can locate and reopen any equipment profile in a variety of ways. If the user knows the user group, owner, or TA-building location, they are able to locate the equipment profile using the search paths in the navigation panel of the equipment navigator. If the user knows the equipment ID or the equipment name, they are able to refine their search in the options choice of the menu bar.

To reopen an existing equipment profile using the navigation panel in the equipment navigator, perform the following steps:

1. Click the expand icon next to the user group that the equipment belongs to.

Note: Depending on which search path is selected in the navigation panel, options are displayed by user group and owner, owner and equipment type, or TA-building location and equipment type. To switch search paths, select from the drop-down list provided.

2. Under the user group chosen, click the owner that the equipment belongs to. See example in Figure 8-16.

Note: Notice that once the owner is selected, a list of equipment profiles is populated in the profile panel of the equipment navigator screen organized by ID, equipment name, user-group, location, owner, and status.

3. When the desired equipment profile has been located, double-click the corresponding row. This deploys the equipment profile shown in Figure 8-17.

To reopen an existing equipment profile in the equipment navigator using an ID, perform the following tasks:

1. Go to the Options menu and select Find Equipment > By Equipment ID. An input box like the one below appears.
2. Enter the equipment ID in the field provided.
3. Click OK. The desired equipment profile will be displayed in the profile panel of the equipment navigator.
4. Double-click the displayed equipment ID to deploy the equipment profile.

To reopen an existing profile in the equipment navigator using the equipment name, perform the following steps:

1. Go to the Options menu and select Find Equipment > By Equipment Name. An input box like the one below appears.
2. Enter the equipment name in the field provided.
3. Click OK. A list of equipment with the desired name populates in the navigator.

   Note: Many pieces of equipment with the desired name appeared. A name search may not be as accurate as the user would like, it is recommended that when assigning and/or searching a name to a piece of equipment that the user be as specific as possible.
4. Double-click the row of the desired equipment name to deploy the equipment profile.

   Note: An alternate search route can be found in the main application page under Search in the menu bar. Here you will find the similar options to open an existing equipment profile as stated previously, either by ID or by name.

12.3.2 Printing the Equipment Profile Report

To print the equipment profile report from any of the profile panels within the equipment profile, perform the following steps:

1. Click the Print icon on the toolbar of the equipment profile screen. The equipment profile report appears in a separate screen.
2. Click the Print icon in the top left corner of the screen to deploy the Microsoft print selection screen shown below.
3. Select the appropriate printer, range of pages, and number of copies you need.

4. Click OK to print the document.

Note: The equipment profile report can also be exported as an electronic copy (Crystal Report RPT, Adobe Acrobat PDF, Microsoft Word editable RTF, Rich Text Format RTF, or Comma-Separated Values CSV) by clicking the Export button next to the Print button on the equipment profile report screen. By selecting the export format, page range, and location from the provided export form, a user can keep an electronic copy of the equipment profile report locally on their machine.

12.3.3 Printing Equipment Status Reports

Convenient status reports are also available for inventory purposes. Three important characteristics are reported in the status report: owner, location, and status. A user can view equipment status reports organized by either the equipment owner or the equipment coordinator.

To print an equipment status report by coordinator, perform the following tasks:

1. Go to Reports and select Equipment Information > Equipment Status by Coordinator in the menu bar of the main application page. This opens the report shown below.
2. Click the Print icon in the top left corner of the screen to deploy the Microsoft print selection screen shown below.

Note: Equipment status reports are organized by user-group, status, and then owner.

3. Select the appropriate printer, range of pages, and number of copies you need.
4. Click OK to print the document.

Note: The equipment profile report can also be exported as an electronic copy (Crystal Report RPT, Adobe Acrobat PDF, Microsoft Word editable RTF, Rich Text Format RTF, or Comma-Separated Values CSV) by clicking the Export button next to the Print button on the equipment profile report screen. By selecting the export format, page range, and location from the provided export form, a user can keep an electronic copy of the equipment profile report locally on their machine.

To print an equipment status report by owner, perform the following tasks:

1. Go to Reports and select Equipment Information > Equipment Status by Owner in the menu bar of the main application page. This opens the report shown below.
2. Click the Print icon in the top left corner of the screen to deploy the Microsoft print selection screen shown below.

Note: Equipment status reports are organized by owner, status, and then user-group.

3. Select the appropriate printer, range of pages, and number of copies you need.
4. Click OK to print the document.

12.4 Mobile Equipment Management

The mobile device can be used to add calibration information for most equipment types (excluding scales, pH meters, and other specialized equipment). It can also be used to print equipment labels using the mobile printer.

13Appendices

13.1 Appendix A: Workflow Diagrams

The work path diagrams in this appendix illustrate the strict workflow that is in place for TRU operations at CMR and TA-55, PF-4. They include solid in-line and out-of-line (OOL) waste as well as liquid waste and cementation.

Figure #1A:
55-MTRU-ITM-SW: TA-55 MTRU Solid Waste Item to Packaging
55-TRU-ITM-SW: TA-55 TRU Solid Waste Item to Packaging

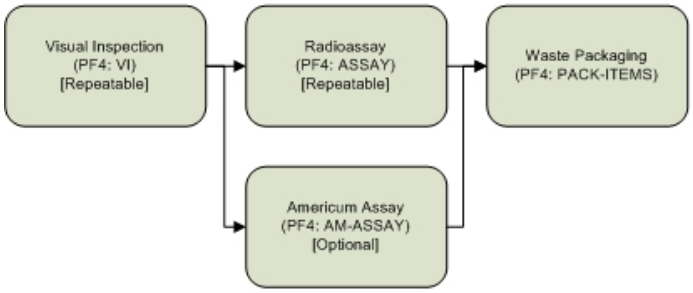


Figure #1B:
03-MTRU-ITM-SW: CMR MTRU Solid Waste Item to Packaging (Assay Required)
03-TRU-ITM-SW: CMR TRU Solid Waste Item to Packaging (Assay Required)

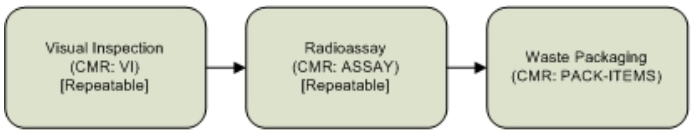


Figure #1C:
03-MTRU-ITM-SW-NR: CMR MTRU Solid Waste Item to Packaging (Subaccountable)
03-TRU-ITM-SW-NR: CMR TRU Solid Waste Item to Packaging (Subaccountable)

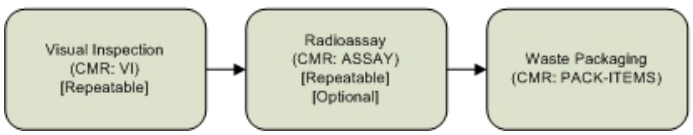


Figure #1D:
55-MTRU-INL-ITM: TA-55 MTRU Inline Waste Item
55-TRU-INL-ITM: TA-55 TRU Inline Waste Item

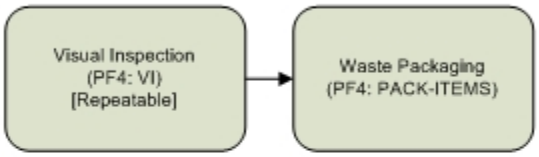


Figure #1E:
03-MTRU-INL-ITM: TA-55 MTRU Inline Waste Item
03-TRU-INL-ITM: TA-55 TRU Inline Waste Item

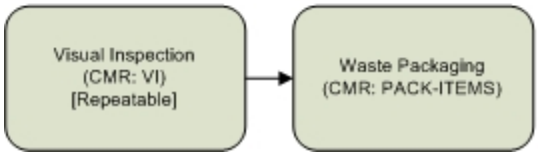


Figure #2:
55-MTRU-DRM-S: TA-55 MTRU Packaged Waste to TA-54/WIPP
55-TRU-DRM-S: TA-55 TRU Packaged Waste to TA-54/WIPP

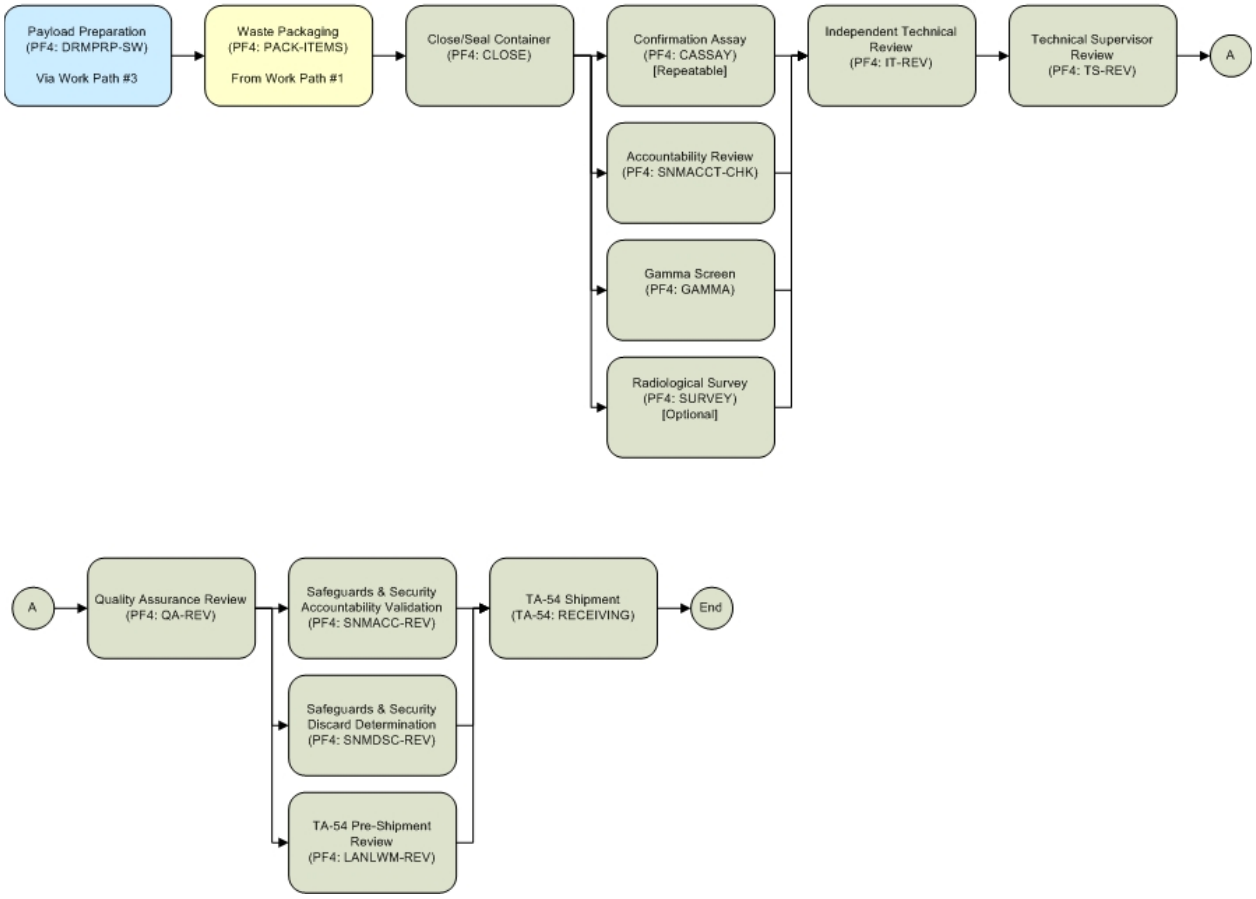


Figure #3A:
55-DRMPRP-SW: TA-55 Payload Container Preparation for Solid Waste

Figure #3B:
55-DRMPRP-CM: TA-55 Payload Container Preparation for Cementation

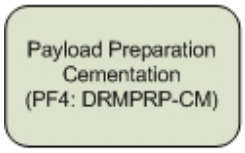


Figure #3C:
03-DRMPRP-SW: CMR Payload Container Preparation for Solid Waste

Figure #4:
55-MTRU-INL-DRM: TA-55 MTRU Inline Waste to TA-54/WIPP
55-TRU-INL-DRM: TA-55 TRU Inline Waste to TA-54/WIPP

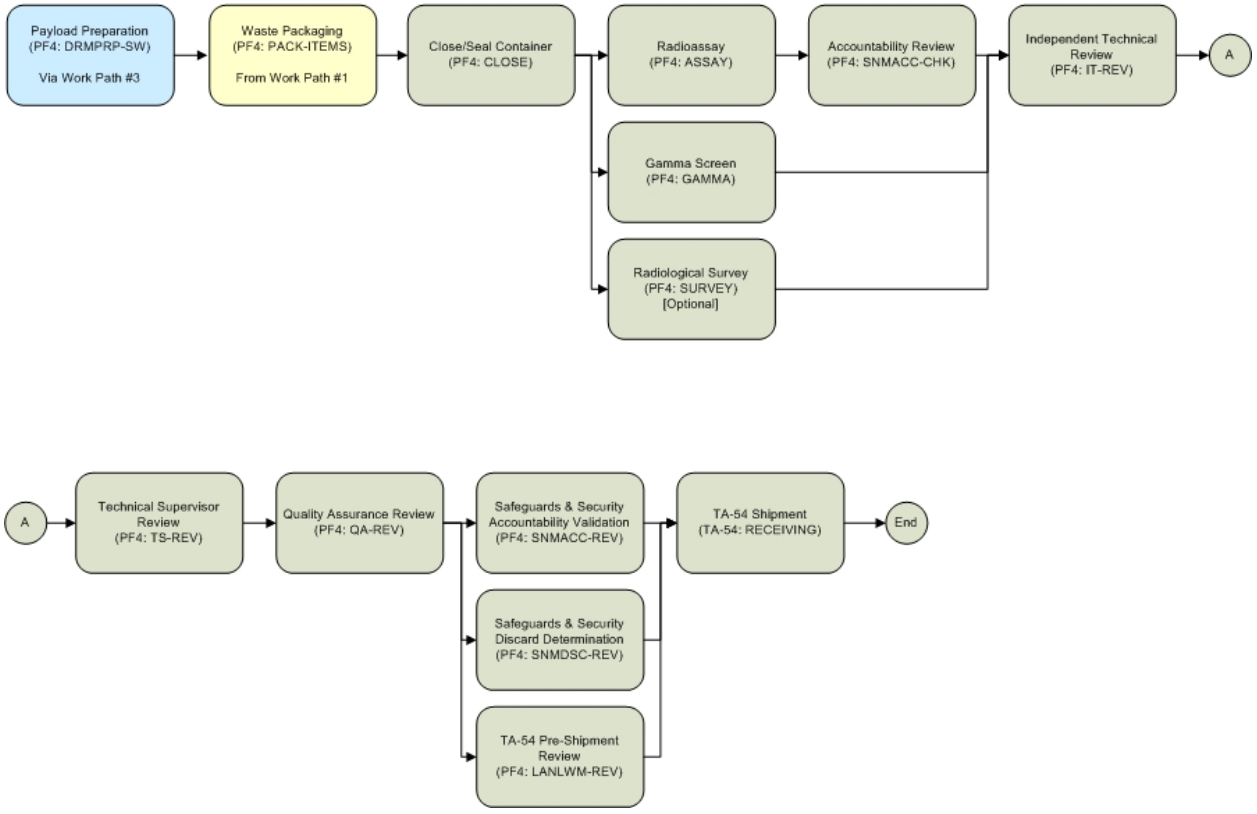


Figure #5A:
55-MTRU-ITM-LQ-TNK: TA-55 MTRU Liquid Waste Item to Cementation via Tank System
55-TRU-ITM-LQ-TNK: TA-55 TRU Liquid Waste Item to Cementation via Tank System

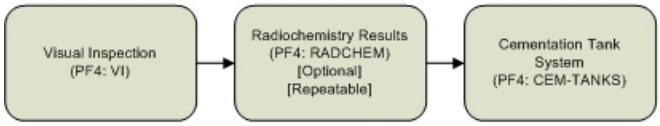


Figure #5B:
55-MTRU-ITM-LQ-CEM: TA-55 MTRU Liquid Waste Item to Cementation via Container
55-TRU-ITM-LQ-CEM: TA-55 TRU Liquid Waste Item to Cementation via Container

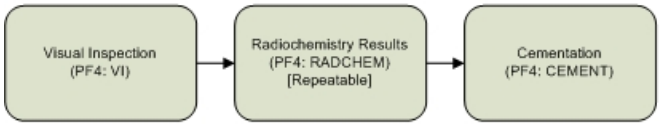


Figure #5C:
55-MTRU-ITM-SW-CEM: TA-55 MTRU Solid Waste Item to Cementation via Container
55-TRU-ITM-SW-CEM: TA-55 TRU Solid Waste Item to Cementation via Container

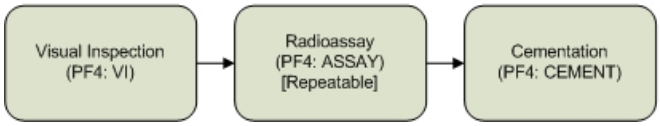


Figure #6A:
55-MTRU-TNKSYS: PF4 MTRU Cementation Tank System

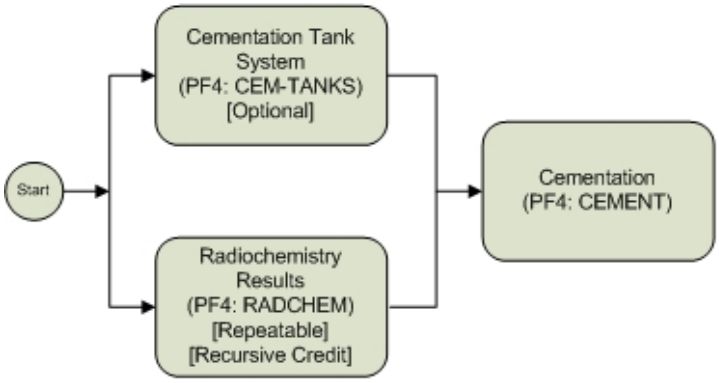


Figure #6B:
W-55-MTRU-TNKSYS: WMS PF4 MTRU Cementation Feed Tank System

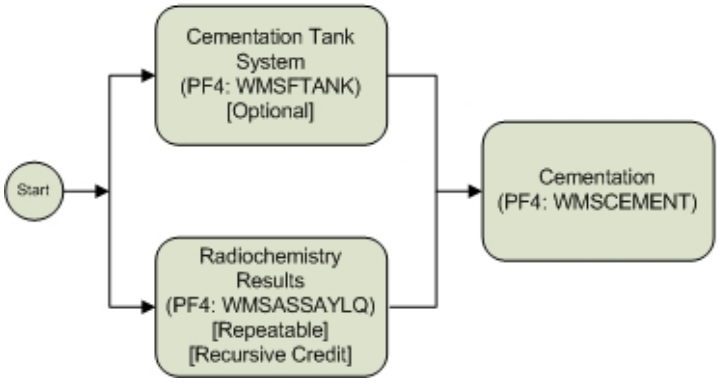


Figure #7:
55-MTRU-CEMENT: TA-55 MTRU Cemented Waste to TA-54/WIPP
55-TRU-CEMENT: TA-55 TRU Cemented Waste to TA-54/WIPP

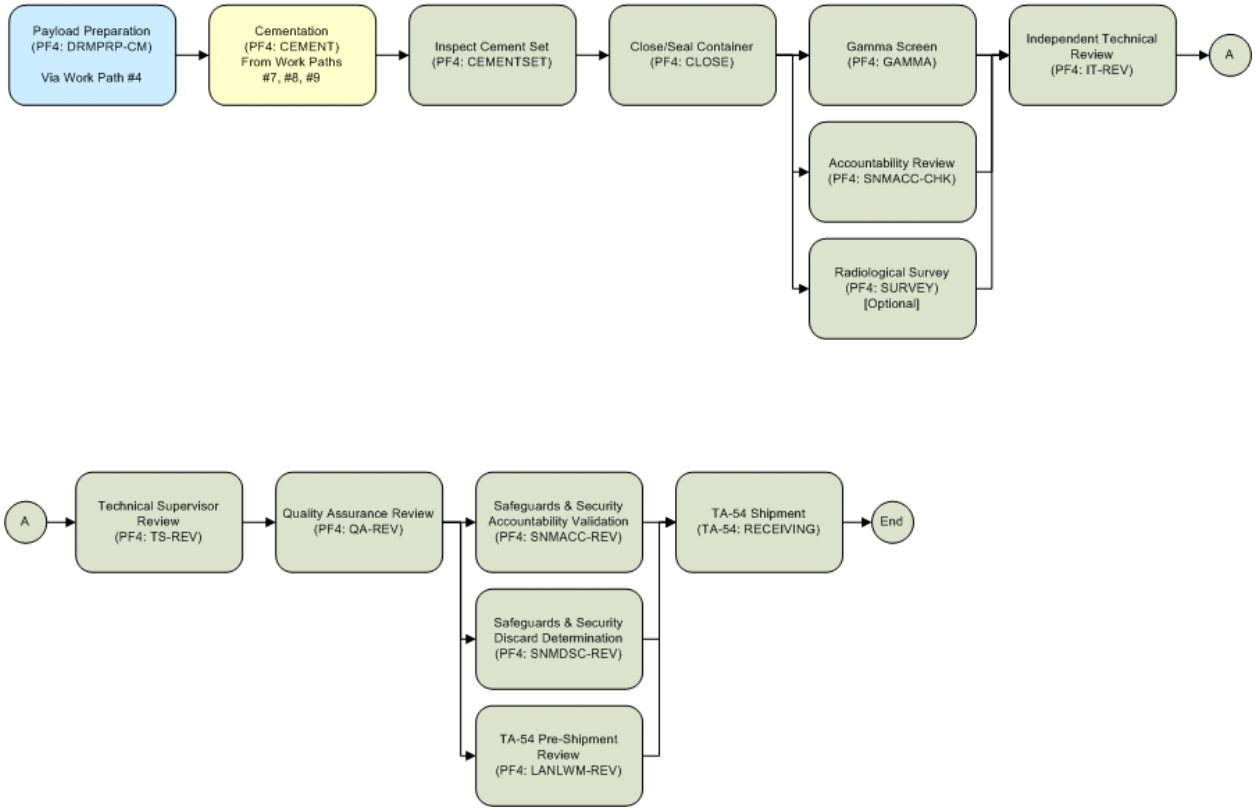


Figure #8:
03-MTRU-DRM-CONFIRM: CMR MTRU Packaged Waste with Confirmation Assay for TA-54/WIPP
03-TRU-DRM-CONFIRM: CMR TRU Packaged Waste with Confirmation Assay for TA-54/WIPP

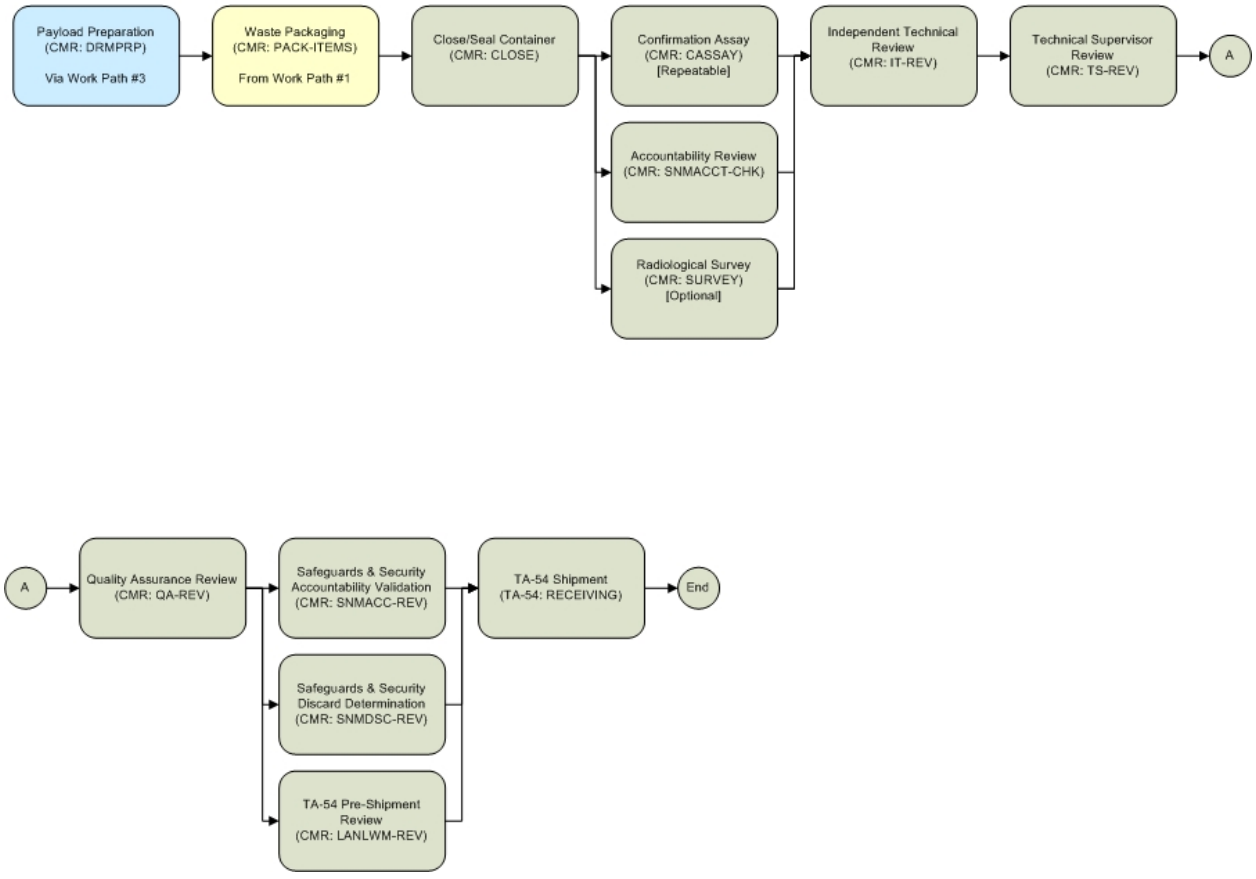


Figure #9:
03-MTRU-INL-SW: CMR MTRU Inline Waste to TA-54/WIPP
03-TRU-INL-SW: CMR TRU Inline Waste to TA-54/WIPP

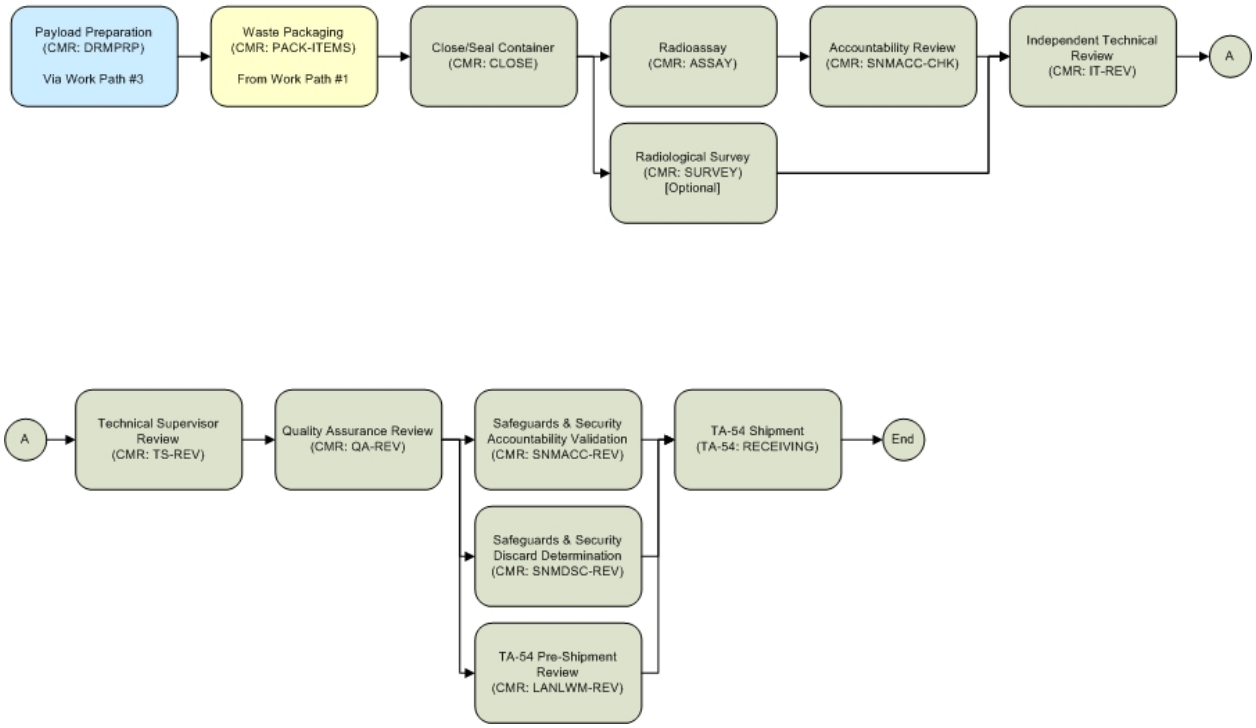


Figure #10:
03-MTRU-INL-CM: CMR MTRU Inline Waste for TA-55 Cementation
03-TRU-INL-CM: CMR TRU Inline Waste for TA-55 Cementation

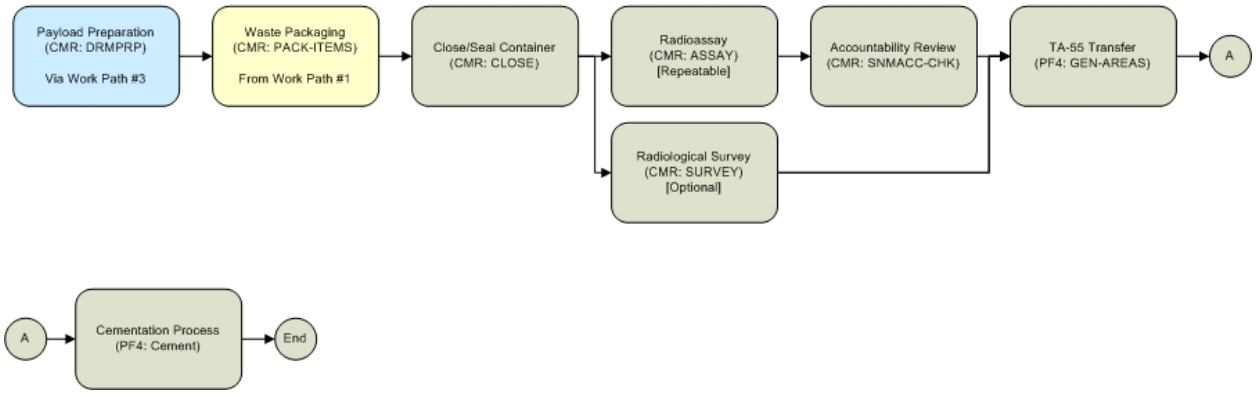


Figure #11:
03-MTRU-ITM-CM: CMR MTRU Packaged Waste for TA-55 Cementation
03-TRU-ITM-CM: CMR TRU Packaged Waste for TA-55 Cementation

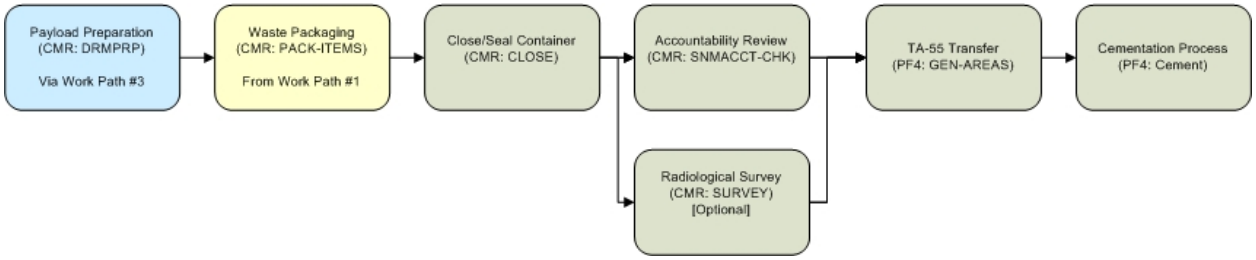


Figure #12A:
W-55-MTRU-ITM-S-VI: WMS PF4 MTRU Solid Waste Item VI
W-55-TRU-ITM-S-VI: WMS PF4 TRU Solid Waste Item VI

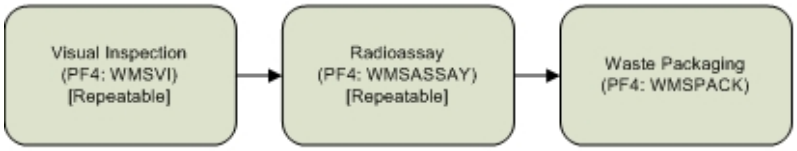


Figure #12B:
W-55-MTRU-ITM-S-VE: WMS PF4 MTRU Solid Waste Item VE
W-55-TRU-ITM-S-VE: WMS PF4 TRU Solid Waste Item VE

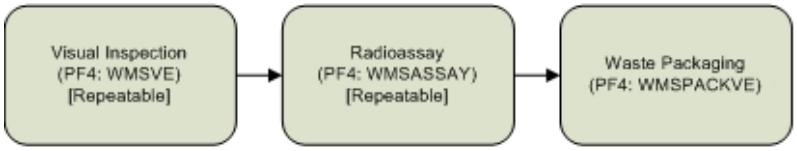


Figure #12C:
W-55-MTRU-ITM-S-VEVI: WMS PF4 MTRU Solid Waste Item VE & Pack VI
W-55-TRU-ITM-S-VEVI: WMS PF4 TRU Solid Waste Item VE & Pack VI

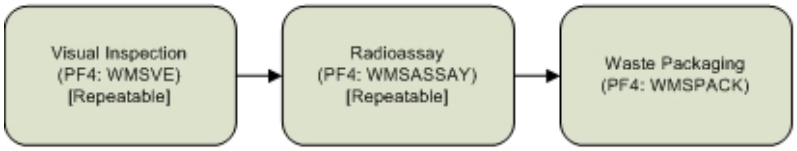


Figure #12D:
W-55-MTRU-ITM-S-VIVE: WMS PF4 MTRU Solid Waste Item VI & Pack VE
W-55-TRU-ITM-S-VIVE: WMS PF4 TRU Solid Waste Item VI & Pack VE

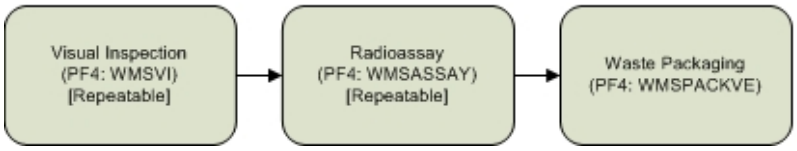


Figure #12E:
W-55-MTRU-ITM-LQ-TNK: WMS MTRU Liquid Waste Item to Cementation via Tank System
W-55-TRU-ITM-LQ-TNK: WMS TRU Liquid Waste Item to Cementation via Tank System

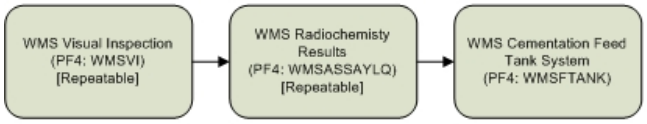


Figure #12F:
W-55-MTRU-ITM-LQ-CEM: WMS MTRU Liquid Waste Item to Cementation via Container
W-55-TRU-ITM-LQ-CEM: WMS TRU Liquid Waste Item to Cementation via Container

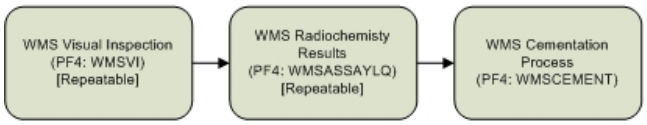


Figure #12G:
W-55-MTRU-ITM-SW-CEM: WMS MTRU Solid Waste Item to Cementation via Container
W-55-TRU-ITM-SW-CEM: WMS TRU Solid Waste Item to Cementation via Container

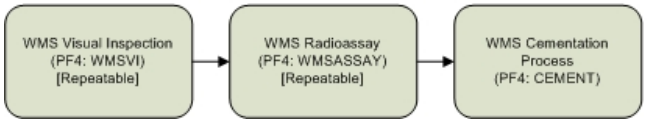


Figure #13A:
W-03-MTRU-ITM-S-VI: WMS CMR MTRU Solid Waste Item VI
W-03-TRU-ITM-S-VI: WMS CMR TRU Solid Waste Item VI

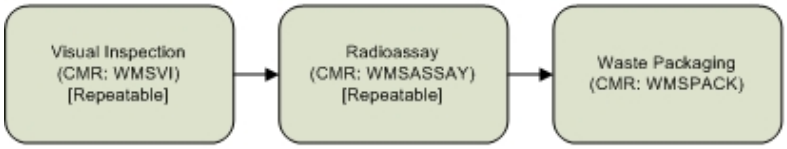


Figure #13B:
W-03-MTRU-ITM-S-VE: WMS CMR MTRU Solid Waste Item VE
W-03-TRU-ITM-S-VE: WMS CMR TRU Solid Waste Item VE

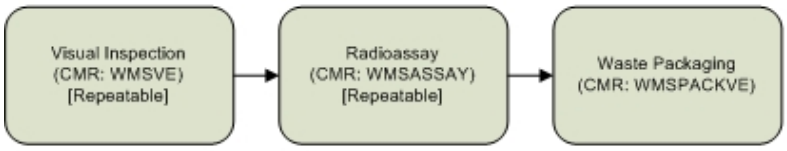


Figure #13C:
W-03-MTRU-ITM-S-VEVI: WMS CMR MTRU Solid Waste Item VE & Pack VI
W-03-TRU-ITM-S-VEVI: WMS CMR TRU Solid Waste Item VE & Pack VI

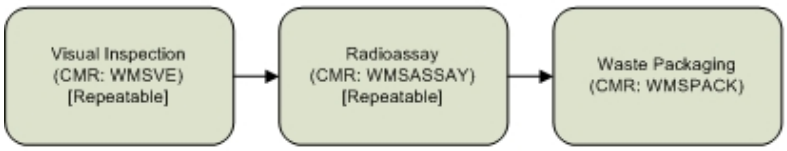


Figure #13D:
W-03-MTRU-ITM-S-VIVE: WMS CMR MTRU Solid Waste Item VI & Pack VE
W-03-TRU-ITM-S-VIVE: WMS CMR TRU Solid Waste Item VI & Pack VE

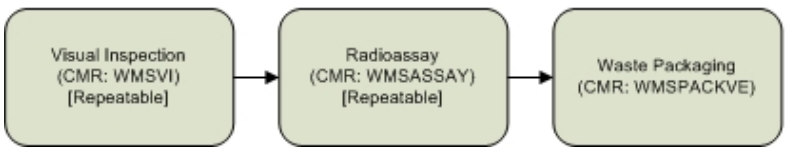


Figure #13E:
W-03-MTRU-ITM-LQ-CEM: WMS MTRU Liquid Waste Item to Cementation via Container
W-03-TRU-ITM-LQ-CEM: WMS TRU Liquid Waste Item to Cementation via Container

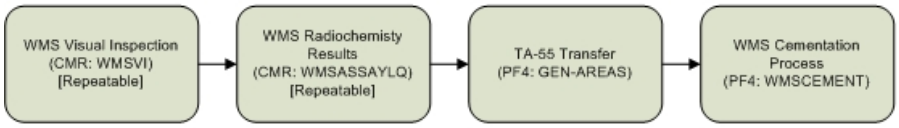


Figure #13F:
W-03-MTRU-ITM-SW-CEM: WMS MTRU Solid Waste Item to Cementation via Container
W-03-TRU-ITM-SW-CEM: WMS TRU Solid Waste Item to Cementation via Container

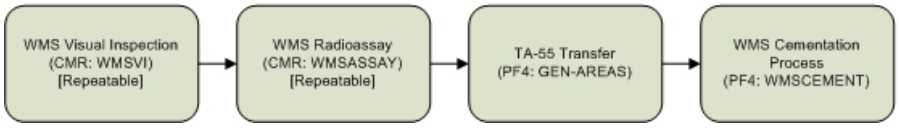
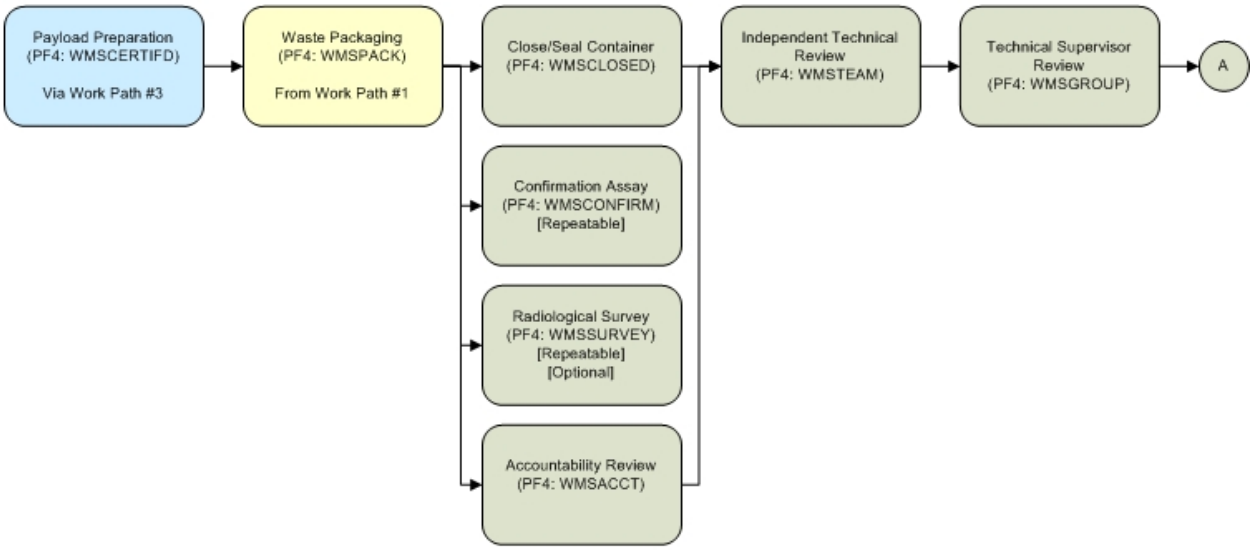


Figure #14:
W-55-MTRU-DRM-S: WMS TA-55 MTRU Packaged Waste to TA-54/WIPP
W-55-TRU-DRM-S: WMS TA-55 TRU Packaged Waste to TA-54/WIPP



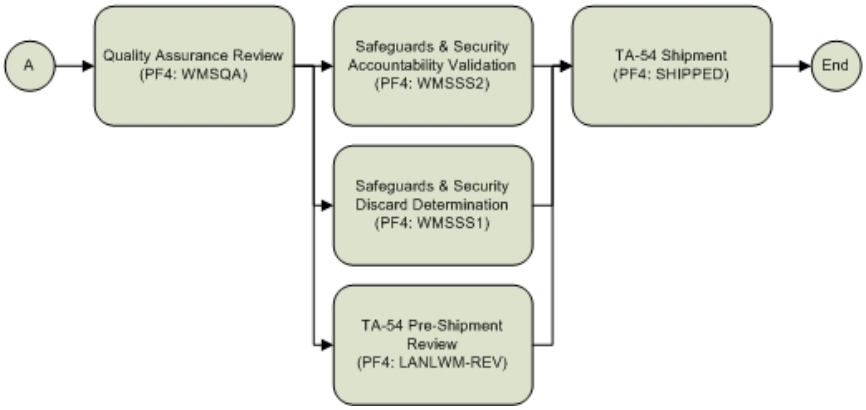


Figure #15:
W-03-MTRU-DRM-S: WMS CMR MTRU Packaged Waste to TA-54/WIPP
W-03-TRU-DRM-S: WMS CMR TRU Packaged Waste to TA-54/WIPP

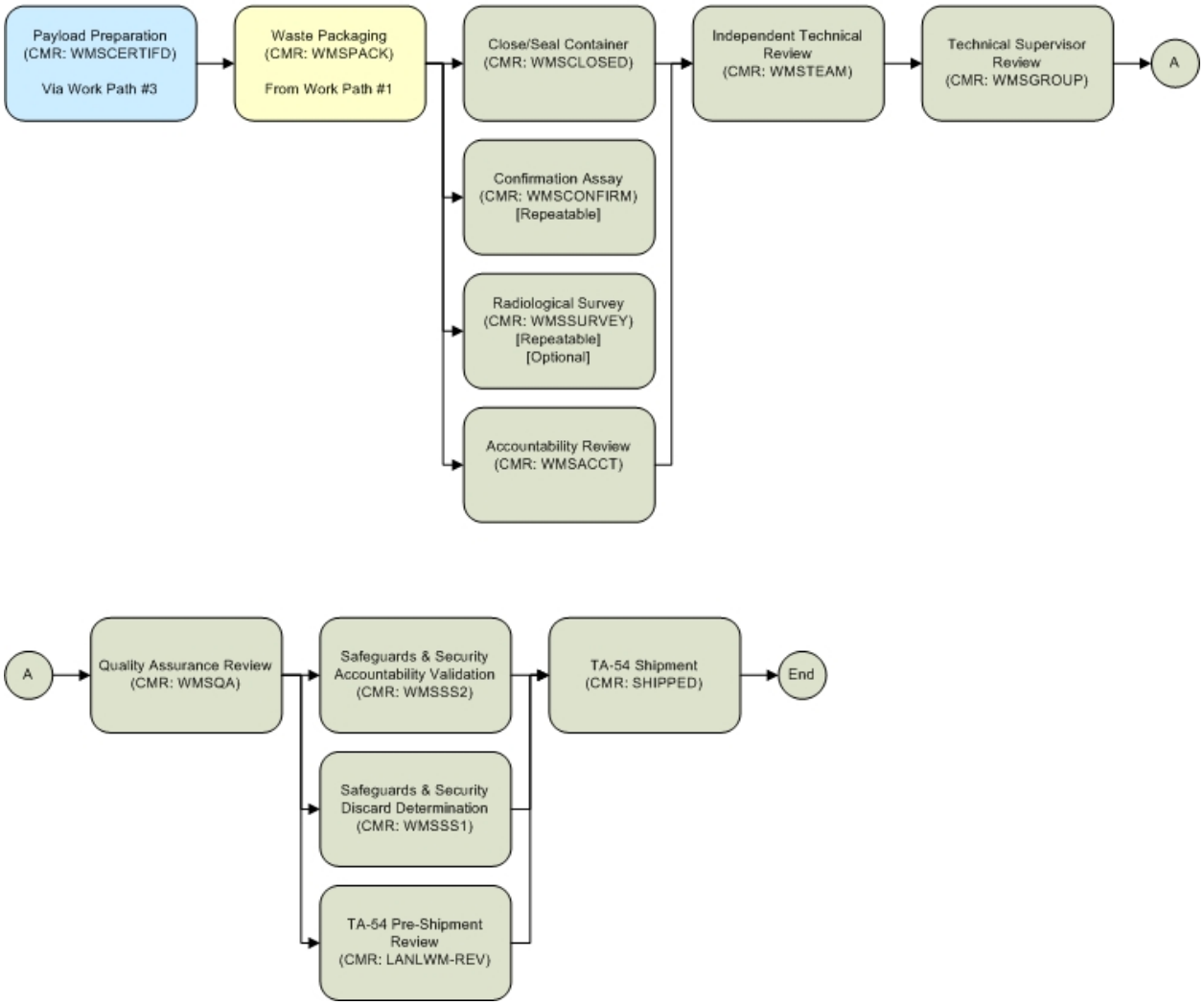
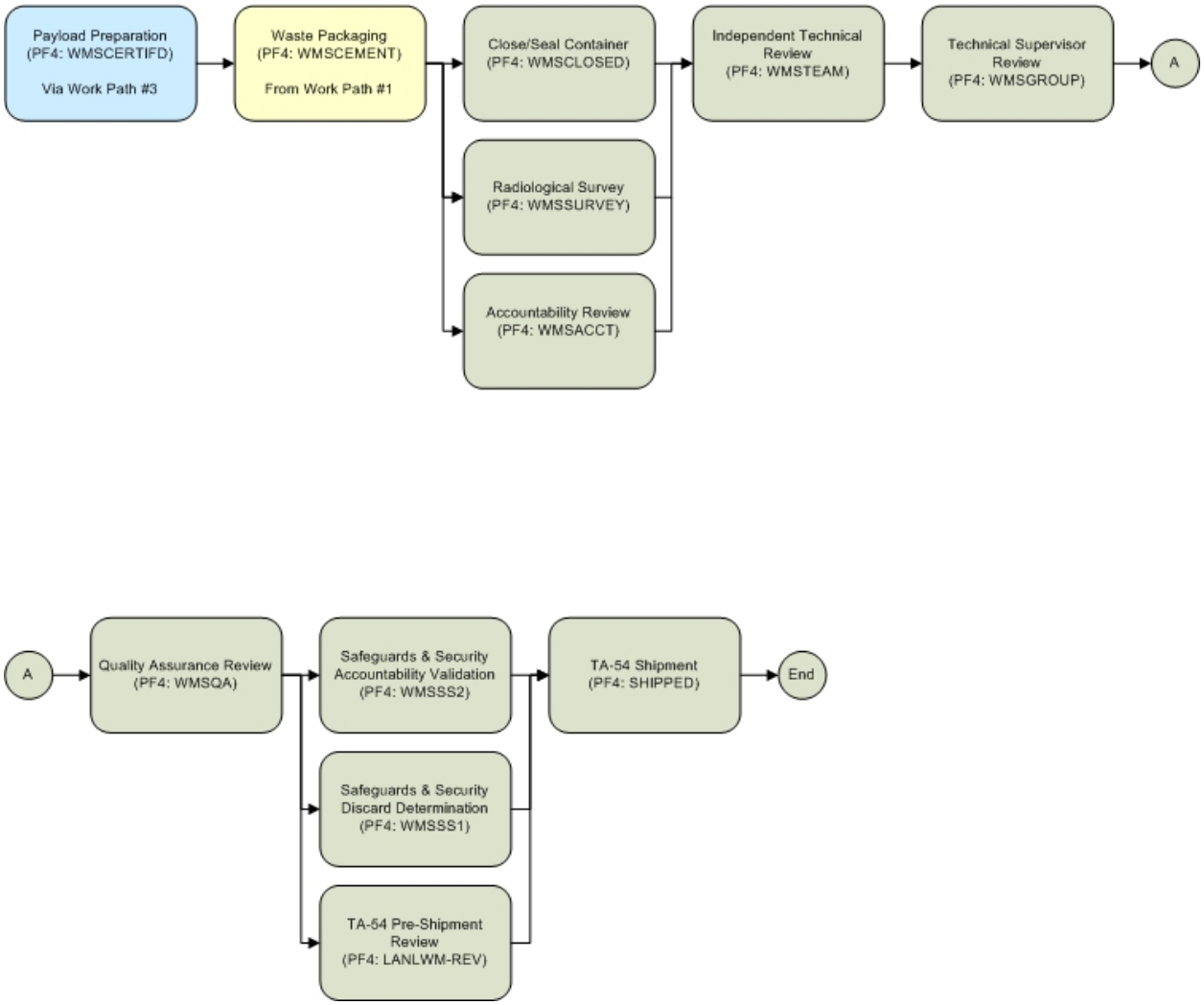


Figure #16:
W-55-MTRU-DRM-C: WMS TA-55 MTRU Cemented Waste to TA-54/WIPP
W-55-TRU-DRM-C: WMS TA-55 TRU Cemented Waste to TA-54/WIPP



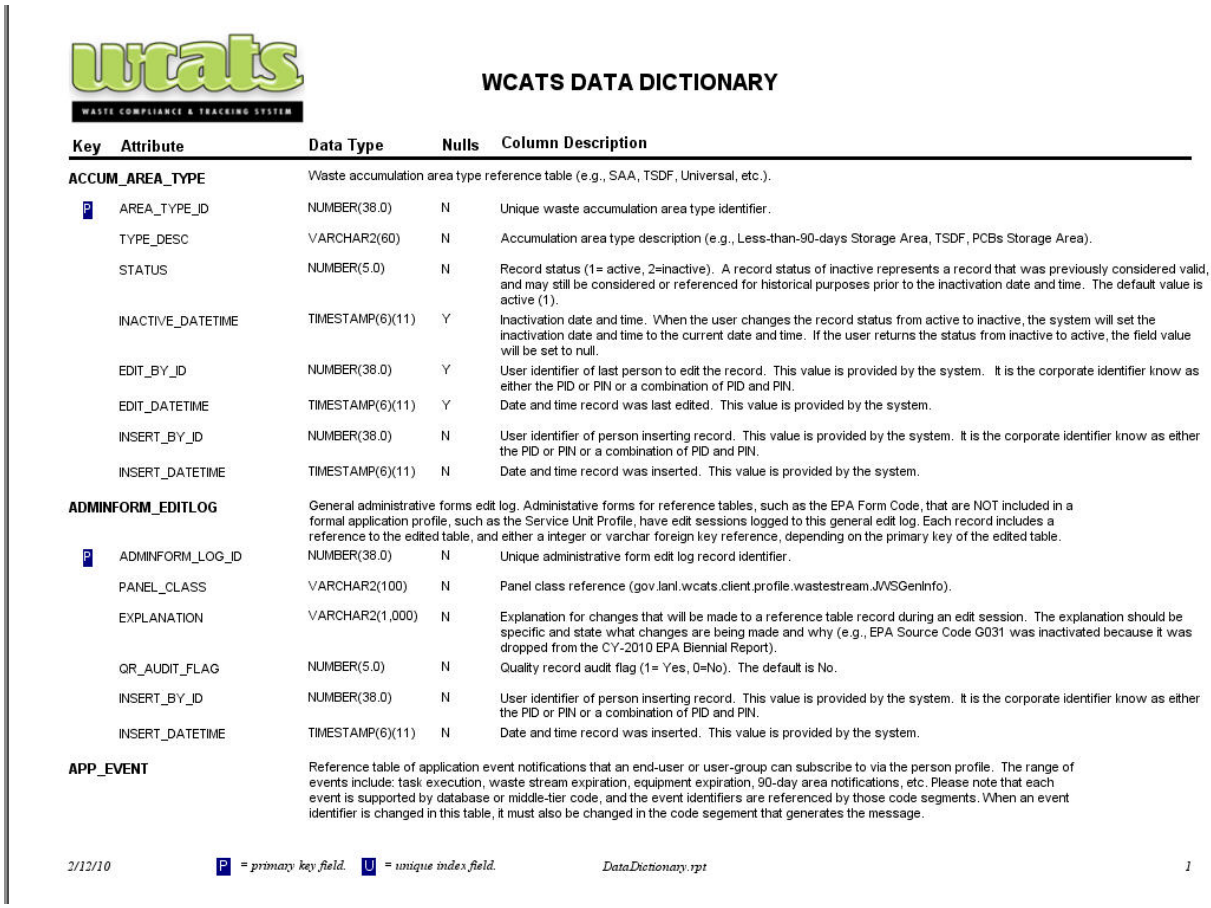
13.2 Appendix B: Data Dictionary

The WCATS data dictionary is available on the application itself. Follow the steps below to get access to it.

1. Go the WCATS menu bar, and select Reports > System Information > Data Dictionary.
2. A new screen opens with the data dictionary in it. Resize the screen as you wish.

Below is the first page of the data dictionary.

Figure 13-1



WCATS DATA DICTIONARY

Key	Attribute	Data Type	Nulls	Column Description
ACCUM_AREA_TYPE		Waste accumulation area type reference table (e.g., SAA, TSDF, Universal, etc.).		
P	AREA_TYPE_ID	NUMBER(38.0)	N	Unique waste accumulation area type identifier.
	TYPE_DESC	VARCHAR2(60)	N	Accumulation area type description (e.g., Less-than-90-days Storage Area, TSDF, PCBs Storage Area).
	STATUS	NUMBER(5.0)	N	Record status (1= active, 2=inactive). A record status of inactive represents a record that was previously considered valid, and may still be considered or referenced for historical purposes prior to the inactivation date and time. The default value is active (1).
	INACTIVE_DATETIME	TIMESTAMP(6)(11)	Y	Inactivation date and time. When the user changes the record status from active to inactive, the system will set the inactivation date and time to the current date and time. If the user returns the status from inactive to active, the field value will be set to null.
	EDIT_BY_ID	NUMBER(38.0)	Y	User identifier of last person to edit the record. This value is provided by the system. It is the corporate identifier know as either the PID or PIN or a combination of PID and PIN.
	EDIT_DATETIME	TIMESTAMP(6)(11)	Y	Date and time record was last edited. This value is provided by the system.
	INSERT_BY_ID	NUMBER(38.0)	N	User identifier of person inserting record. This value is provided by the system. It is the corporate identifier know as either the PID or PIN or a combination of PID and PIN.
	INSERT_DATETIME	TIMESTAMP(6)(11)	N	Date and time record was inserted. This value is provided by the system.
ADMINFORM_EDITLOG		General administrative forms edit log. Administative forms for reference tables, such as the EPA Form Code, that are NOT included in a formal application profile, such as the Service Unit Profile, have edit sessions logged to this general edit log. Each record includes a reference to the edited table, and either a integer or varchar foreign key reference, depending on the primary key of the edited table.		
P	ADMINFORM_LOG_ID	NUMBER(38.0)	N	Unique administrative form edit log record identifier.
	PANEL_CLASS	VARCHAR2(100)	N	Panel class reference (gov.lanl.wcats.client.profile.wastestream.JWSGenInfo).
	EXPLANATION	VARCHAR2(1,000)	N	Explanation for changes that will be made to a reference table record during an edit session. The explanation should be specific and state what changes are being made and why (e.g., EPA Source Code G031 was inactivated because it was dropped from the CY-2010 EPA Biennial Report).
	QR_AUDIT_FLAG	NUMBER(5.0)	N	Quality record audit flag (1= Yes, 0=No). The default is No.
	INSERT_BY_ID	NUMBER(38.0)	N	User identifier of person inserting record. This value is provided by the system. It is the corporate identifier know as either the PID or PIN or a combination of PID and PIN.
	INSERT_DATETIME	TIMESTAMP(6)(11)	N	Date and time record was inserted. This value is provided by the system.
APP_EVENT		Reference table of application event notifications that an end-user or user-group can subscribe to via the person profile. The range of events include: task execution, waste stream expiration, equipment expiration, 90-day area notifications, etc. Please note that each event is supported by database or middle-tier code, and the event identifiers are referenced by those code segments. When an event identifier is changed in this table, it must also be changed in the code segement that generates the message.		

13.3 Appendix C: Reports

Report Group	Report Title
AK & WPF Information	Acceptable Knowledge Profile Summary List
	Process/Status Code Reference
	Special/Prohibited Characteristics Reference
	Waste Matrix Reference
	Waste Source Reference
	Waste Stream Profile
	Waste Stream Profile Status
	Waste Type Profile
	Waste Type Reference
	Waste Type Signature Definitions
	Work Path Definition
Container Information	Container Profile
	Container Type & Subtype Reference
	TRU Waste Storage Record
	TWSR Data Sheet
Equipment Information	Equipment Manager Report
	Equipment Profile
	Equipment Status by Coordinator
	Equipment Status by Owner
Equipment Reference	Equipment Status Reference
	Equipment Type Reference

Report Group	Report Title
Facility Inventory	Facility Inventory
Facility Limit	Facility Limit
Facility Operations	Facility Inventory Activity
Mobile Application Reference	Mobile Devices
	Mobile Keypool Status
	Mobile Tables
Nuclear Material Reference	Nuclear Material Discard Matrix Reference
	Nuclear Material Discard Sets
	Nuclear Material Type Isotopic Breakdown
	Nuclear Material Type Reference
	Radioassay Measurement Codes
	Radionuclide Reference
	Units of Nuclear Material Quantity
	Units of Specific Activity
Regulatory Reference	Chemical Reference
	DOT Hazardous Materials Reference
	EPA Form Code Reference
	EPA Source Code Reference
	EPA Source Code Reference
	RCRA Handling Codes
	RCRA Hazardous Constituents Reference
	Special/Prohibited Characteristics Reference
	Waste Type Reference

Report Group	Report Title
System Information	Application Report Reference
System Information	Data Dictionary
	Database Sequences
	Database Table Indexes
	External Interface Run Log
	Server Configuration
	Stored Object Code: Packages
	Stored Object Code: Procedures & Functions
	System Utilization by User Table & View Permissions
	Task Logic Procedures
	Task Profile Panels by Service Unit
	User Authentication Attempts
	Waste Stream Profile Panels
Task Profile	General Task Profile
	PF4: Accountability Check Report
	PF4: Cement Accountability
	PF4: Cementation Worksheet
	PF4: TRU Waste Packaging Planning
	PF4: TRU Waste Packaging Planning #2
	Tank Transfer Worksheet
TRU Reference	BIR Matrix Codes
	Layers of Confinement Reference
	TRU Shipping
	Category Reference

Report Group	Report Title
TRU Reference	WIPP Prohibited Items
	WIPP TRUCON Code Reference
	WIPP Waste Material Parameters
	WIPP Waste Stream Reference
Unit Inventory	Unit Inventory
Unit Limit	Unit Limit
Unit Operations	Pending Service Unit
	Pending Service Unit
	Service Unit Activity
Units of Measure	Units of Concentration
	Units of Mass & Weight Reference
	Units of Nuclear Material Quantity
	Units of Specific Activity
	Units of Volume Reference
Users & Group Membership	Behavior Type Reference
	System Utilization by User
	User Group Definition
	User Group Profile
	User Groups & Group Membership

Report Group	Report Title
Waste Facility Reference	Company Profile
	Facility Compliance Definition
	Facility Profile
	Facility, Unit, Grid Summary Report
Waste Facility Reference	Service Unit Profile
	Tank System Definition
	Work Path Definition
Work Path Profile	Work Path Profile

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Effective Date: 4/30/15	Next Review Date: 4/30/18	

Environment, Safety, Health Directorate

Waste Management Services

Administrative Procedure

Reviewing and Approving Waste Stream Profiles (WSP) in WCATS

Quality Assurance Reviewer:

Name:	Organization:	Signature:	Date:
Larry W. Maassen	QPA-IQ/WM	Signature on File	4/29/15

Derivative Classifier: ☐ **Unclassified or** ☐ **DUSA ENVPRO**

Name:	Organization:	Signature:	Date:
Larry W. Maassen	QPA-IQ/WM	Signature on File	4/29/15

Approval Signatures:

Subject Matter Expert:	Organization:	Signature:	Date:
Andy Elicio	WM-SVS	Signature on File	4/29/15
Responsible Line Manager:	Organization:	Signature:	Date:
Steve J. Singledecker	WM-SVS	Signature on File	4/30/15

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REVISION HISTORY

Document Number and Revision *[Include revision number, beginning with Revision 0]*	**Effective Date** *[Document Control Coordinator inserts effective date]*	**Description of Changes** *[List specific changes made since the previous revision]*
WM-SVS-AP-201 R 0	4/30/15	New Document

Table of Contents

1.0 INTRODUCTION

This administrative procedure provides instructions for the review and approval of waste stream profiles (WSP). This procedure is developed for the WSP reviewer who performs technical reviews of WSPs in the Waste Compliance and Tracking System (WCATS). This review ensures waste profiles have been sufficiently and accurately characterized to ensure proper classification in accordance with Los Alamos National Laboratory (LANL), state, and federal regulations and requirements. This guidance document also addresses LANL directives such as P930-1, "LANL Waste Acceptance Criteria," the LANL Hazardous Waste Facility Permit, and the "Waste Compliance and Tracking System User's Manual, MAN-5004, R2," as applicable.

1.1 Scope

This procedure is specifically written for the WSP reviewer who performs technical reviews of WSPs that have been electronically submitted to WCATS. The procedure is intended to ensure the appropriate waste classification (i.e., waste type), U.S. Environmental Protection Agency (EPA) hazardous waste numbers (aka, waste codes), subcategories, and applicable ancillary waste types (e.g., polychlorinated biphenyl [PCB], beryllium, asbestos, New Mexico Special Waste [NMSW]) are assigned to the waste stream, as applicable.

There are, however, specific waste streams that require additional reviews by LANL subject matter experts (SMEs) tasked with performing a final review, concurrence, and approval of a WSP characterization relative to their area of expertise (e.g., PCB, Environmental Restoration [ER], high explosives (HE), High Explosive Water Treatment Facility [HEWTF], Radioactive Liquid Waste Treatment Facility [RLWTF], Radioactive Liquid Waste Treatment Plant [RLWTP], Sanitary Waste Water Systems [SWWS], National Nuclear Security Site [NNSS]). This procedure does not address the review and approval processes performed by these on-site LANL SMEs (refer to Appendix #1, *LANL REVIEWERS,* for a list of waste types and/or on-site treatment, storage, and disposal facilities [TSDFs]).

2.0 RESPONSIBILITIES

WM-SVS Team Leader

- Authorizes WSP reviews

Generator

- Ensures their WSPs are accurate and up to date.
- Complies with all applicable LANL policies and procedures, including the WCATS User's Manual.

Waste Management Coordinator

- Serves as designated Point of Contact (POC) between the WSP reviewer and the generator
- Assists generators in characterizing and documenting the waste streams in WCATS
- Perform pre-WSP review of waste streams before signing and submitting WSPs to WCATS for review.

WSP Reviewer

- Performs WSP reviews for LANL waste to ensure completeness, consistency, accuracy of the submitted information, and to ensure the WSP meets regulatory requirements and LANL directives for waste management.
- Works with generators and/or WMCs to resolve WSP discrepancies
- Determines and applies EPA hazardous waste codes and subcategories to include EPA source and form codes and applicable ancillary waste types.

3.0 PERFORMANCE: REVIEWING AN ELECTRONIC WASTE STREAM PROFILE

Note: An authorized reviewer(s) should review all incoming WSP within 10 working days of receipt.

Note: WCATS gives users several options for receiving WSP notification messages. Users can opt to be automatically notified when their signature is required on a WSP. Notifications can be sent as email or text message, sent to a pager, or be available as system messages that appear when the user logs into WCATS.

Complete Attachment 1 - "WSP Review Checklist" to track and document progress in performing the WSP review process.

3.1 General Review of an Electronic WSP

Authorized WSP Reviewer

Step	Action
	Note 1: If there are problems, inconsistencies, or inaccuracies during a review, do NOT approve the WSP and notify the WMC/generator. **Note 2:** Generators may create a "to be determined" (TBD) WSP. In such cases, characterization and documentation will be provided in the individual container record or waste disposal request (WDR), and all WCATS panels may not be completed at the WSP level as required below.
1	**Log In** to WCATS using Z# and Cryptocard.
2	**Click** on the waste stream navigator icon from the WCATS main screen to launch the waste stream. **Select** LANL, select the appropriate technical area (i.e., TA-55), select the appropriate generator or WMC for the WSP review.
3	**Double Click** on WSP number to begin your review or use the magnifying glass at the top right corner of the screen. Enter the WSP number in the input box to display the WSP.
4	**Click** on the panel list on the left of the screen to view container details.
5	**Verify** the WSP is electronically signed by the generator and WMC (as the Waste Certifying Official).

Step	Action
6	**Verify** the WSP characterization supports the waste type. Ensure relevant characterization data are attached and fully support the characterization (e.g., analytical, documented acceptable knowledge [AK], material safety data sheet [MSDS], waste characterization strategy form [WCSF], or procedures/polices). **Ensure** characterization and packaging information described in the WSP meets the applicable WAC. **Note:** *If waste does not meet the WAC,* ***Then Reject*** *the WPF.* ***Contact*** *the generator to complete a WAC Exception Form (WEF).*
7	**Verify** the correct waste type and special waste destination panels are selected and populated. (e.g., SWWS, RLWTF). **Note:** *For ER waste, verify the solid waste management unit (SWMU) and area of concern (AOC) site designations are documented on WSP.*
8	**Verify** the waste matrix, chemical, and physical characteristics indicated are consistent with the waste described (e.g., solids do not have a pH; aqueous liquids typically have a pH).
9	**Ensure** panels are complete and accurate. Ensure there is a defined process and a concise description of the waste-generating activities.
10	**Verify** the LDR Information, LDR Certifications, and UHC panels are complete and accurate for RCRA hazardous/mixed wastes.
11	**IF** There are problems, inconsistencies or in accuracies or if the WSP needs clarifications regarding waste stream characterization, **THEN** contact the WMC.

3.2 Performance- Technical Reviews of WCATS Screens

This section is performed using WCATS, and will provide guidance and a basis for decisions to:

- Approve or reject waste profiles
- Request additional information from the generator
- Defer approval decision to the WM SVS team leader.

Note 1: An authorized reviewer(s) should review all incoming WSPs within 10 working days of receipt.

Note 2: The following steps may be completed in any order.

Authorized WSP Reviewer

Step	Action
1	**General Information Panel** **Check** the first panel in WCATS, "General Information," and note the waste type. Compare the WSP to the applicable LANL WAC attachment. **IF** the WSP submitted exceeds the criteria of the applicable WAC section, **THEN** the waste type or specifics of the WSP may need to be amended to meet the appropriate WAC attachment. **Ensure** the Waste Stream Name is clear, concise, complete, and descriptive, consistent with the WSP characterization, and is not just a default copy of the Process Description. **Note:** Specific waste types trigger specific panels in WCATS to be populated.
2	**Site Area Panel** **Ensure** the following fields are completed: TA, building, generating group, and area type. **If** there is an entry in the SWMU/AOC field, **THEN** this will trigger an additional "ER Review." **If** waste is not from, or associated with, a SWMU or AOC, **THEN ensure** the field is left blank and not "N/A."
3	**Method of Characterization Panel** **Ensure** a Method(s) of Characterization is selected (checked), For each method selected, **ensure** the appropriate attachment is selected (checked), and the document referenced is listed/specified. All documentation referenced should be uploaded in the following "Documentation Panel," unless the waste stream is classified, sensitive, or unclassified controlled nuclear information (UCNI). **Ensure** the method of characterization provides a compliant and defensible waste characterization, classification, and management avenue for the waste.
4	**Documentation Panel** **Ensure** any and all documentation referenced under the Method of Characterization panel is attached (uploaded to WCATS) under the Documentation panel. • In the case of AK documentation, ensure defensible references and sufficient, stand-alone documentation are clearly defined/referenced and attached. • In the case of analytical data, ensure data are traceable to the profiled waste, to include but not limited to, Chain-of-Custody (COC), waste sample identification numbers, Sample Management Office (SMO) sample event number(s), etc. **IF** analytical data are attached or referenced as the method of characterization, **THEN** all detected analytes must be addressed in Toxicity Characteristics, Composition, and/or Additional Information panels.
5	**Waste Prevention/ Minimization Panel** **Review** panel for completeness and accuracy.

Step	Action
6	**Chemical/Physical Information** **Review** panel for completeness, accuracy, and consistency with other panels, especially Waste Category, Process and Waste description, Ignitability/Corrosivity/ Reactivity (I/C/R) Characteristics, Composition and Additional Information.
7	**Waste Category Panel** **Review** panel for completeness, accuracy and consistency with other panels, in particular Chemical/Physical Information, Process and Waste Description, I/C/R Characteristics, Composition, and Additional Information. Ensure all applicable categories are checked.
8	**Generator Estimates Panel** **Review** panel for completeness and reasonableness.
9	**Annual Generation Panel** No action required. Panel will populate automatically when containers are assigned to the waste profile.
10	**Process and Waste Description Panel** **Review** panel for completeness and accuracy. **Ensure** that the generator provided a clear and concise description of the waste-generating process, and a separate clear and concise description of the waste itself. The Process Description must be detailed enough to enable the reviewer to accurately complete the Review – Composition Panel, with respect to EPA Source and Form codes for RCRA hazardous wastes.
11	**I/C/R Characteristics Panel** Review panel against appropriate/attached AK documentation and analytical data. **Key points:** Ignitability (I) as defined by 40 CFR 261.21 (D001) Corrosivity (C) as defined by 40 CFR 261.22 (D002) Reactivity (R) as defined by 40CFR 261.23 (D003) **Ensure** selections in this panel are consistent with other panels, especially Composition, Toxicity Characteristics, and Additional Information. **Note**: Complete and accurate selections in this panel are necessary for correct assignment of EPA characteristic waste codes, and accurate and compliant Department of Transportation (DOT) waste classification. **Note**: Non-aqueous refers to <20% water in the waste

Step	Action
12	**Toxicity Characteristics Panel** Review panel against appropriate/attached AK documentation and analytical data. **Key Points:** Ensure all toxicity characteristic (TC) contaminants, either detected per attached data or identified via AK documentation, are accounted for on this panel. **Ensure** the appropriate data source or analytical method is checked: AK versus toxicity characteristic leaching procedure (TCLP) or totals analysis. Entry shall be made for all contaminants even if marked "none." **Ensure** the assigned min-max ranges of identified contaminants are consistent with attached data and AK, including appropriate margins of waste variability based on the Process and Waste Description, Composition, and Additional Information panels.
13	**Composition Panel** **Review** panel against appropriate/attached AK documentation and analytical data. **Key Points:** **Ensure** all elements of the waste matrix described under Process and Waste Description not already accounted for under the TC Panel are accounted for here. **IF** the total of all contaminants listed under the Toxicity Characteristics panel plus the total of all the materials listed under the Composition panel, as summed at the bottom of the Composition panel, exceeds 130%, **THEN ensure** the variability in the waste stream does not result in potentially conflicting RCRA characterization or DOT classification. **Note:** Variability of the waste stream shall be limited such that the waste as generated is always bounded by the I/C/R Characteristics and TC panels. **Note:** Detected contaminants not already identified under the TC panel may be grouped or summarized here (e.g. as "other detected contaminants").
14	**Additional Information Panel** **Ensure** that supplemental waste description, characterization, or classification information not included or appropriate for other panels, but necessary for accurate and compliant waste management, is included here. Examples may include (1) For a waste stream that is classified, sensitive, or UCNI, a statement indicating that AK Documentation/analytical data are not attached to the WSP but are maintained with the generator; (2) additional waste stream narratives or clarifications; (3) Clarification or explanation of attached AK or data.
15	**Work Control Documentation Panel** **Review** panel for completeness, accuracy and consistency with other panels

Step	Action
16	**Packaging/Storage Control Panel** **Review** panel for completeness, accuracy, and consistency. **Ensure** the panel includes a detailed waste packaging description, and/or a statement indicating the waste will be packaged in DOT compliant containers and/or in accordance with the appropriate WAC. **Ensure** at least one storage control measure is documented for the waste stream.
17	**LDR Information Panel** If waste stream is a characteristic or listed waste, **ensure** the LDR form and applicable certifications are attached. Based on waste stream information, **evaluate** the LDR information provided by the generator. **Review** panel for completeness, accuracy, and consistency and to ensure generator provided documentation supports waste characterization as per 40 CFR 268.40.
18	**LDR Certification Panel** This panel will be automatically populated based on the information provided in the LDR Information Panel.
19	**UHC Panel** If the waste stream is a characteristic waste, identification of UHCs may be required. Based on characterization and documentation, **ensure** appropriate UHCs are identified on the WSP as defined in 40 CFR 268.40 and 40 CFR 268.48
20	**Waste Specific Panels** **Note**: If analysis and AK determines that waste does not meet specific criteria in the WAC, waste may still be approved with the generation of a waste-specific WEF and facility specific approval (see section 6.0).
a	**Wastewater (SWWS) Panel** **Ensure** analysis or AK documentation supports compliance with the SWWS WAC.
b	**Wastewater (RLWTF TA50) Panel** **Ensure** analysis or AK documentation supports compliance with the RLWTF WAC. Ensure RLWTF additional screens are completed and within the parameters defined in P930-1. Ensure chemicals listed on the "additive" screen are not RCRA hazardous.
c	**Wastewater (RLWTP TA53) Panel** **Ensure** analysis or AK documentation supports compliance with the RLWTP WAC. Ensure RLWTP additional screens are completed and within the parameters defined in P930-1. **Ensure** chemicals listed on the "additive" screen are not RCRA hazardous.

Step	Action
21	**Nuclides Panel (NNSS Waste Only) Panel** Nuclides panel shall be populated for waste destined for NNSS. **Ensure** radionuclides listed in this panel have defensible supporting documentation/data. **Ensure** ENV-RCRA-Tool-313 (AK Package Guidance for low-level waste) is attached to the WSP.
22	**Waste Certification Statements Panel** **Ensure** one certification statement is marked. If waste stream is identified as "needs exception/exemption for treatment, storage, or disposal," **ensure** a completed WEF is attached. (see section 6.0)
23	**Cost Codes Panel** **Ensure** active cost string is included in the WSP. WCATS verifies active cost strings with a green light. Ensure allocation adds up to 100%.
24	**Work Path Panel** Work paths are WCATS defined. **Ensure** at least one or more active work paths are selected as appropriate for the waste type.
25	**Review – EPA Codes Panel** **Ensure** all appropriate waste codes are assigned., EPA characteristic waste codes are derived primarily from the I/C/R and TC panels, while EPA listed waste codes are typically determined from the Process and Waste Description, Composition, and Additional Information panels.
26	**Review – Composition Panel** Apply applicable EPA Source and Form codes as defined by the EPA. **Identify** the primary waste composition and additional descriptions as applicable.
27	**Review – Classification Panel** **Perform** a final overall review of the waste stream to ensure all regulatory requirements are addressed. **Select** ancillary waste types as applicable, if they have not already been assigned.
28	**Signatures Panel** **Ensure** WSP is signed by the generator (waste-generating official) and the WMC (waste-certifying official). If reviews are complete and waste profile is accurately and defensibly documented, complete WSP review signature by clicking the "sign" tab.

4.0 WAC EXCEPTIONS

Note: This section provides an overview of WAC Exceptions and WEFs. WSP reviewers ensure that any WAC exceptions are part of the WSP package, but do not process them.in general, WSPs must meet all specified criteria of the applicable WAC in order to be approved by the WSP reviewer. However, minor

exceptions to the WAC may be approved by the receiving facility on a case-by-case based, and the WSP reviewer may approve the WSP based on the following:

> **IF** the WSP does not meet the specified criteria of the designated WAC, **THEN** the WSP reviewer shall ensure that a completed and approved WAC Exception Form (WEF, Form 1973) which addresses the WAC deficiency is attached to the WSP under Documentation.

5.0 DEFINITIONS AND ACRONYMS.

5.1 Definitions

Acceptable Knowledge (AK)—A waste stream characterization method that can be used to meet all or part of the waste analysis requirements appropriate for the waste media. The method may include documented process knowledge (knowledge of process [KOP]), supplemental waste analysis data, and/or facility records of analysis. [ENV-RCRA-Tool-101].

Area of Concern - Area of Concern (AOC) means any area that may have had a release of hazardous waste or hazardous constituents, which is not from a solid waste management unit (LANL Part B Permit, NMED, 2010)

Characterization—The determination of a waste's physical, chemical, and radiological characteristics with sufficient accuracy to permit proper segregation, treatment, storage, and disposal according to the final treatment, storage, or disposal facilities (TSDFs) waste acceptance criteria (WAC). [ENV-RCRA TOOL-101]

EPA Hazardous Waste Number [40 CFR §260.10]—means the number assigned by EPA to each hazardous waste listed in part 261, subpart D, and to each characteristic identified in part 261, subpart C. These are typically referred to in this document and elsewhere as EPA waste codes.

Low-Level Radioactive Waste (LLW) [DOE Order 435.1-1]—Radioactive waste that is not high-level waste, spent nuclear fuel, transuranic waste, byproduct material (as defined in section 11e.(2) of the Atomic Energy Act of 1954, as amended), or naturally occurring radioactive material.

Mixed LLW Waste [RCRA, 42 U.S.C. 6903(41)]—Any waste containing hazardous waste and source, special nuclear, or by-product materials subject to the Atomic Energy Act of 1954: "The use of the generic term "

MIXED WASTE" – This generic terms refers to both mixed LLW waste and mixed TRU waste." [ENV-RCRA TOOL-101]

New Mexico Special Waste [20 NMAC 9.2.7 (S) (13)]—The following types of solid waste have unique handling, transportation, or disposal requirements to ensure protection of the environment, public health, welfare, and safety: treated formerly characteristic hazardous waste; packing house and killing plant offal; asbestos waste; ash; infectious waste; sludge, except compost that meets the provisions of 40 CFR Part 503; industrial solid waste; spill of a chemical substance or commercial product; and petroleum-contaminated soils.

Solid Waste 20 NMAC 9.2.2 (S) (9)—This classification includes any garbage, refuse, sludge from a waste treatment plant, or air pollution control facility and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining,

construction, demolition, and agricultural operations and from community activities, but does not include the following:

- Drilling fluids, produced waters, and other nondomestic wastes associated with the exploration, development or production, transportation, storage, treatment or refinement of crude oil, natural gas, carbon dioxide gas or geothermal energy
- Fly ash waste, bottom ash waste, slag waste and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels and wastes produced in conjunction with the combustion of fossil fuels that are necessarily associated with the production of energy and that traditionally have been and actually are mixed with and are disposed of or treated at the same time with fly ash, bottom ash, boiler slag or flue gas emission control wastes from coal combustion
- Waste from the extraction, beneficiation and processing of ores and minerals including phosphate rock and overburden from the mining of uranium ore, coal, copper, molybdenum, and other ores and minerals.
- Agricultural waste including, but not limited to, manure and crop residues returned to the soil as fertilizer or soil conditioner.
- Cement kiln dust waste.
- Sand and gravel.
- Solid or dissolved material in domestic sewage; or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, 33 U.S.C. Section 1342; or source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, 42 U.S.C. Section 2011 et seq., as amended
- Densified-refuse-derived fuel
- Any material except petroleum contaminated soils, regulated by Subtitle C or Subtitle I, 42 U.S.C. Section 6901 et seq. of the federal RCRA of 1976;
- Substances regulated by the federal Toxic Substances Control Act (TSCA), 15 U.S.C. Section 2601 et seq., as amended
- Radioactive waste (Source, special nuclear, or by-product materials subject to the Atomic Energy Act of 1954)

Solid Waste Management Unit or "SWMU" {20 NMAC 4.2.7 (NN)} - means any discernible unit at which solid wastes have been placed at any time "from which the Department determines there may be a risk of a release of hazardous waste or hazardous waste constituents" (NMED, 2010), irrespective of whether the unit was intended for the management of solid or hazardous waste; such units include any area at a facility at which solid wastes have been routinely and systematically released.

Transuranic (TRU) waste [DOE M 435.1-1]—Radioactive waste containing more than 100 nanocuries (3700 Becquerels) of alpha-emitting transuranic isotopes per gram of waste, with half-lives greater than 20 years, except for (1) high-level radioactive waste; (2) waste that the Secretary of Energy has determined, with the concurrence of the Administrator of the EPA, does not need the degree of isolation required by the 40 CFR Part 191 disposal regulations; or (3) waste that the Nuclear Regulatory

Commission has approved for disposal on a case-by-case basis in accordance with Part 61 of title 10 CFR.

Waste Generators—Individuals and their line management having direct responsibility for operations that generate waste. Waste generators have the responsibility for waste minimization, characterization, storage, and disposal of the waste they generate. [ENV-RCRA TOOL-101]

Waste Management Coordinator (WMC)—The individual responsible for coordinating waste management activities on behalf of waste generators, line managers, facility managers, field project leaders, waste management groups, and other LANL organizations. [ENV-RCRA TOOL-101]

5.2 Acronyms

AOC	area of concern
AK	acceptable knowledge
CFR	Code of Federal Regulations
ENV-RCRA	Environment Protection – Water Quality and RCRA
EPA	Environmental Protection Agency (U.S.)
ER	Environmental Restoration
HAZW	Hazardous Waste
HE	high explosives
HEWTF	High Explosives Wastewater Treatment Facility
I/C/R	Ignitability/Corrosivity/ Reactivity (RCRA characteristics)
KOP	knowledge of process
LANL	Los Alamos National Laboratory
LDR	land disposal restriction
LLW	low-level waste
MLLW	mixed low-level waste
MSDS	material safety data sheet
NCR	nonconformance report
NMAC	New Mexico Administrative Code
NNSS	National Nevada Security Site (formerly Nevada Test Site)
PCB	polychlorinated biphenyl
RCRA	Resource Conservation and Recovery Act
RLWTF	Radioactive Liquid Waste Treatment Facility
RLWTP	Radioactive Liquid Waste Treatment Plant
SME	Subject matter expert
SWMU	Solid Waste Management Unit
SWWS	Sanitary Waste Water System
TA	technical area
TBD	to be determined
TRU	Transuranic waste
UCNI	Unclassified Controlled Nuclear Information
UHC	Underlying Hazardous Constituent

6.0 RECORDS

All appropriate records generated for a WSP shall be uploaded into WCATs. Records generated as a result of implementing this procedure are: Attachment 1, WSP Checklist. This document will be submitted to the Operations Integration Office (OIO) Records Management designated point of contact for document management in accordance with P1020-1, *Laboratory Records Management,* and with the ADESH-AP-006, *Records Management Plan*.

7.0 REFERENCES

- Title 40, Code of Federal Regulations (40 CFR)
- Title 49, Code of Federal Regulations (49 CFR)
- New Mexico Administrative Code (NMAC)
- P409, Waste Management
- P330-6, Nonconformance ReportingP930-1, LANL Waste Acceptance Criteria
- WCATS (Waste Compliance and Tracking System) User Manual, http://wcatshelp.lanl.gov/

8.0 ATTACHMENTS OR APPENDICES

Attachment1: *WSP Checklist*

ATTACHMENT 1 – WSP CHECKLIST

Page 1 of 3

WSP #	Waste Type			
Waste-Specific Destination (On-Site)				
Ancillary Waste Type(s)				
General Information:		**Yes**	**No**	**N/A**
Does waste stream name clearly and concisely describe a unique waste stream and match the waste type?				
Is the waste type consistent with the waste and process description, TC and/or composition panels?				
Process & Waste Description:		**Yes**	**No**	**N/A**
Does the process description identify and support the WSP name, waste type, waste description, and composition?				
Does the waste description identify and support the WSP name, waste type, process description, and composition?				
For RCRA hazardous/mixed waste streams, do the process description and waste description provide adequate information to accurately assign EPA Source and Form codes under the Review – Composition panel?				
Method of Characterization:		**Yes**	**No**	**N/A**
Are appropriate AK and/data identified and referenced to support the waste type, the applicable on-site waste destination WAC, and the process and waste description?				
Documentation:		**Yes**	**No**	**N/A**
Do uploaded documents/data match and support the selected method(s) of characterization?				
Are all detected analytes/contaminants identified in TC and/or composition panels, as well as in applicable on-Site waste destination-specific criteria panels?				
Waste Category:		**Yes**	**No**	**N/A**
Are all applicable waste categories selected to support those identified or described in the Process Description, Waste Description, Composition, and Additional Information?				
If "Other" is checked, is the waste category specifically described under "Response"?				
Chemical/Physical Information:		**Yes**	**No**	**N/A**
Are the Waste Source Type, Radioactive Waste Type, and especially the Waste Matrix consistent with the WSP name, waste type, Waste Description, and Composition?				

ATTACHMENT 1 – WSP CHECKLIST (CONT.)

Page 2 of 3

I/C/R Characteristics:	Yes	No	N/A
Does the I/C/R Panel agree with and support the waste matrix, composition, etc.? For example:			
Is an ignitability range specified for organic liquids?			
Is a pH range specified for aqueous liquids?			
Is the BP range specified supported by identified constituents/contaminants?			
Are reactivity selections support constituents/contaminants?			
Are characteristics erroneously identified/ranged in that they are not supported by the waste type, waste matrix, composition, waste description, etc.?			
Toxicity Characteristics:	**Yes**	**No**	**N/A**
Are all TC contaminants described under Documentation, Waste Description, or elsewhere in the WSP identified here?			
Is the appropriate data source checked for each contaminant; AK, TCLP, or Total?			
Is the appropriate columns checked for each TC contaminated, whether detected/present or not?			
Are the min-max ranges identified for detected/identified contaminants consistent with supporting data and AK?			
Are the margins for waste variability appropriate for each contaminant, based on the Process Description, Waste Description, Composition, and Additional Information?			
Composition:	**Yes**	**No**	**N/A**
Are all elements of the waste matrix other than TC contaminants described under Process Description, Waste Description, Additional Information, and Documentation identified and appropriately ranged?			
Are the composition materials and their variability (i.e., ranges) consistent with the I/C/R ranges and selected categories?			
Is the variability of total constituents and contaminants limited sufficiently to ensure the waste characterization and DOT classification remain consistent?			
Additional Information:	**Yes**	**No**	**N/A**
Does this panel include any and all information not found in other panels that is necessary and sufficient to compliantly describe, bound, and manage the waste?			
Review - EPA Codes:	**Yes**	**No**	**N/A**
For RCRA-hazardous/mixed waste streams, are all waste codes, both characteristic and listed, accurately and appropriately assigned based on all information and data in the WSP?			
Review - Composition			
Are EPA Source Code and EPA Form code assigned to match characterization?			
Is Primary Composition accurately assigned, and additional description entered for a Primary Composition of "Other"?			
Review - Classification:	**Yes**	**No**	**N/A**

ATTACHMENT 1 – WSP CHECKLIST (CONT.)
Page 3 of 3

Are correct, applicable ancillary waste types selected? (e.g., beryllium-contaminated mixed transuranic waste indicates a Waste Type = Mixed Transuranic Waste with beryllium identified as an ancillary waste type).			
LDR Information (RCRA-Hazardous/Mixed Only):	**Yes**	**No**	**N/A**
Are the LDR category and generator requirements and treatment requirements completely and accurately selected?			
UHCs (RCRA-Hazardous/Mixed Only):	**Yes**	**No**	**N/A**
Are UHCs selected that, at a minimum, match waste codes selected, and all other UHCs identified under Composition, TC Panel, Additional Information and Other (non-TC Characteristic) analytical detects?			
If no UHCs are identified (listed), is the "No UHCs" box checked?			
Waste-Specific Panels:	**Yes**	**No**	**N/A**
Are data input to waste-specific panels supported by attached AK and/or data?			
If one or more waste-specific criteria have not be analyzed for, does waste stream otherwise appear compliant with waste-specific WAC?			
If waste as profiled exceeds one or more waste-specific WAC criteria, has WEF been processed and attached that addresses the non-WAC-compliant criteria?			
Administrative/Minor Reviews:			
Site Area:	**Yes**	**No**	**N/A**
Are all fields, except "SWMU/AOC No.," populated?			
Waste Prevention/Minimization:	**Yes**	**No**	**N/A**
Do selections appear complete, accurate, and appropriate for the waste type?			
Generator Estimates:	**Yes**	**No**	**N/A**
Do data provided appear reasonable and appropriate for waste type and waste description?			
Work Control Documentation:	**Yes**	**No**	**N/A**
Is panel populated and consistent with other information in the WSP?			
Packaging/Storage Control:	**Yes**	**No**	**N/A**
Are both Waste Packaging and Storage Control Measures fields populate/selected?			
Work Path:	**Yes**	**No**	**N/A**
Is at least one work path selected?			
Nuclides:	**Yes**	**No**	**N/A**
Are one or more nuclides identified and ranged for NNSS waste types?			
General Final Review:	**Yes**	**No**	**N/A**
Do all AK documentation, analytical data, and information provided in the WSP provide a complete, accurate, up-to-date, and defensible basis for waste characterization and classification, and demonstrate compliance with the waste destination WAC?			
Are all WCATS fields appropriately completed to facilitate WSP approval and processing in WCATS?			

WSP Approval:		
Reviewer Name	Signature	Date