Obsolete

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WP 05-WH.02
Revision 1

WIPP Waste Handling Operations WDS User's Manual

Cognizant Section: Waste Handling Operations

Approved by: Mark Dziamski

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CHANGE HISTORY SUMMARY

REVISION NUMBER	DATE ISSUED	DESCRIPTION OF CHANGES
0	12/17/09	Creation of Document.
1	06/29/11	Adding abbreviations and acronyms Adding definitions Adding statement in section 5.2.1, 8.3.1 Add TP-III to section 7.2.1, 7.2.2 Removal of sections 7.2.4, 8.4.1, 8.4.2, 8.5.1, 8.5.2 Removing in section 8.0 buttons and descriptions Adding section 9.1.2 Adding and removing in section 11.0 Added new Attachment 2

ABBREVIATIONS AND ACRONYMS

CH	contact-handled
DOE	U.S. Department of Energy
HP	HalfPACT
ID	identification
OJT	on-the-job training
RH	remote-handled
SWB	standard waste box
SLB2	standard large box 2
TDOP	ten-drum overpack
TRAMPAC	TRUPACT-II Authorized Method for Payload Control
TRUPACT-II	Transuranic Package Transporter Model II
TRUPACT-III	Transuranic Package Transporter Model III
WAC	Waste Acceptance Criteria
WDS	Waste Data System
WIPP	Waste Isolation Pilot Plant

1.0 INTRODUCTION

This manual provides instructions for training of Waste Handling Technicians and Waste Handling Engineers in the use of the Waste Isolation Pilot Plant (WIPP) Waste Data System (WDS). The function of this system is to record the waste (and its characteristics) in the repository. The WDS is required for the receipt and emplacement of waste at WIPP. The WDS is defined as the only mission-critical system at WIPP.

This manual is targeted primarily at personnel authorized to transmit data into the WDS for transuranic defense waste payload containers and payload assemblies that are intended for disposal at WIPP. If at any time a problem occurs while using this software, contact the WIPP Waste Information System Data Administrator.

2.0 DEFINITIONS

Assembly - A group of waste containers, such as seven 55-gallon drums or pipe overpacks (seven-pack), four 85-gallon drums, three 100-gallon drums, one standard waste box (SWB), or one ten-drum overpack (TDOP) that comprise a contact-handled (CH) package payload.

Base Type Code - The TRUPACT-II [Transuranic Package Transporter Model II] Authorized Method for Payload Control (TRAMPAC) addresses a certain set of container types (55-gallon drum, 85-gallon drum, SWB, TDOP, several pipe overpacks, and several RH canisters). The WWIS, however, in several cases has more than one container type code that meet, the definition of each of these TRAMPAC container types. For example, there is a 55-gallon drum (type code 1), 55-gallon drum to be overpacked - good condition (16), 55-gallon drum to be overpacked - damaged (17), and 55-gallon drum to be overpacked - solid/vitrified – good (18), and 55-gallon drum to be overpacked - solid/vitrified - damaged (19). All five of these containers meet the TRAMPAC definition of "55-gallon drums." Therefore, the Base Type Code is used to identify the type code of the container type recognized by TRAMPAC. In this example, all five container type codes have a Base Type Code of '1' identifying them all as a "55-gallon drum" for TRAMPAC evaluation.

Containers - The following containers are approved for the WWIS:

- Type 7A drum (55-gallon) (either direct loaded or containing a pipe overpack)
- Type 7A drum (85-gallon) (either direct loaded or containing one 55-gallon drum)
- Type 7A drum (100-gallon)
- SLB2 Standard Large Box 2
- SWB (either direct loaded or containing up to four 55-gallon drums)
- TDOP (either direct-loaded, containing up to 10 drums, up to six 85-gallon drums, or one SWB)

- RH Canister (direct loaded)
- RH Canister (55-gallon drums)
- RH Canister (30-gallon drums)

Database - The electronic storage of data that can be manipulated and retrieved by an end user. The database comprises a series of elements including tables, fields, and records.

Direct Loaded - Direct loaded waste is waste (i.e., debris waste that has not been solidified or vitrified) loaded directly into a waste container for disposal at WIPP. Overpacked damaged drums are treated as direct loaded waste.

Overpack Container Group - Identifies the WWIS container type codes that can be placed together in an overpack container. All four of the 55-gallon, "to be overpacked," container types, can be combined in an overpack. Therefore, they are all assigned the same Overpack Container Group value.

Packaging Container Group - Identifies the WWIS container type codes that can be placed together in a TRUPACT-II or HalfPACT shipping vessel. Latest revision of the TRAMPAC Revision 20 allows 55-gallon drums, 6-inch pipe overpacks and 12-inch pipe overpacks to be transported together in a TRUPACT-II or HalfPACT. All three container types are assigned the same Packaging Container Group value.

Shipment - A group of one and no more than three Type B shipping containers, one 72-B, or 10-160B shipping casks, that will be shipped with one truck.

3.0 ACCESS AND LOGON PROCESS

3.1 Logon to WDS

This software is a web-based software that is installed on the WDS server. Using this method will keep updates of the software more available as they are released.

3.2 WDS Logon Dialog Box

When the Logon Dialog Box appears, enter your WDS username, password and the database instance that you want to access. The production instance where the waste data is recorded is "prd01" and the test instance is "tst01." New WDS users are typically given access to both of these database instances. After logging onto the WDS, follow the prompts, as shown in Figure 3 - 1.

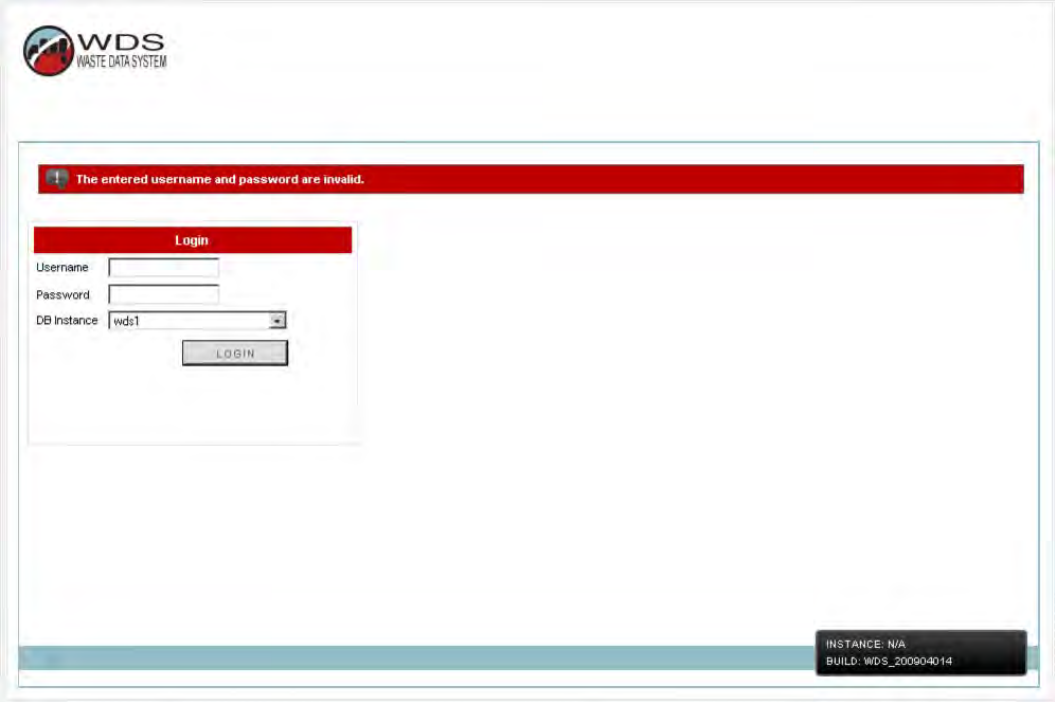


Figure 3 - 1 – WDS Logon

4.0 WASTE HANDLING DASHBOARD

The WDS Waste Handling Dashboard has a number of functions and reports with in this dashboard are shown in Figure 4 - 1.

Figure 4 - 1 – Waste Handling Dashboard

5.0 FUNCTIONS

The Functions dashboard has two buttons on the dashboard. A shipment receipt button and a manual emplacement button as shown in Figure 5 - 1.

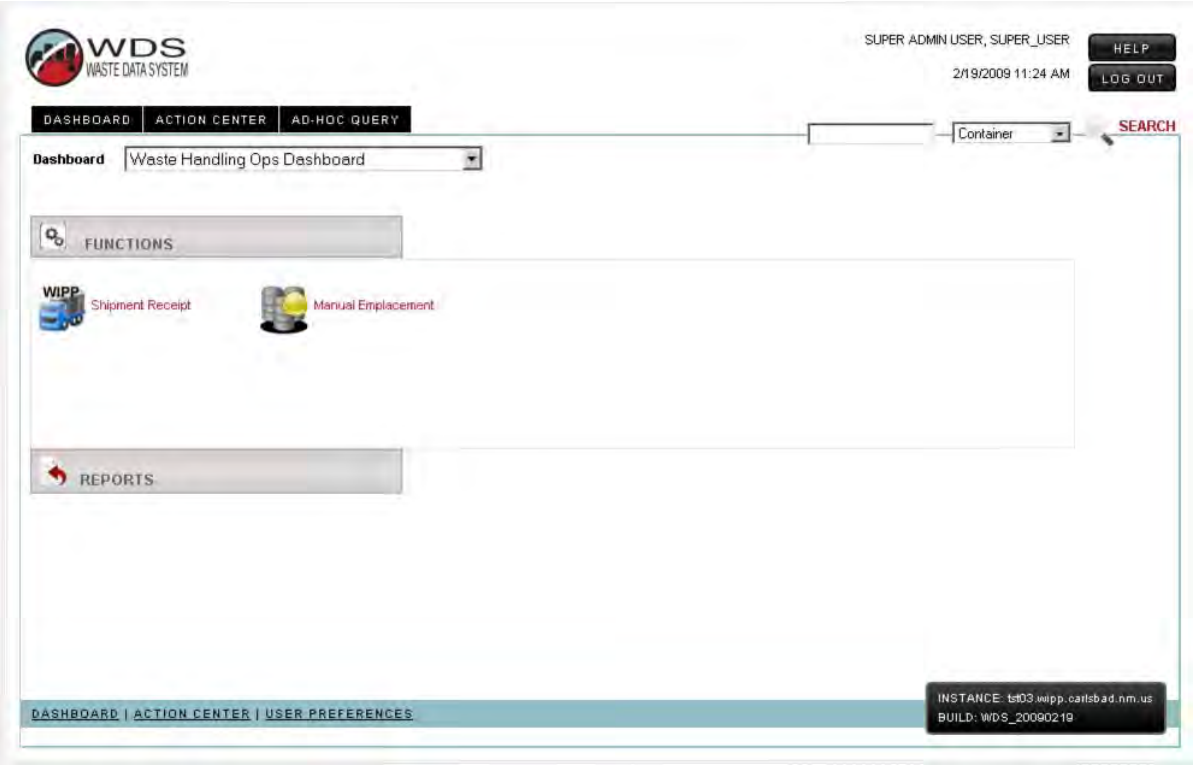


Figure 5 - 1 – Function Dashboard

5.1 Shipment Receipt

5.1.1 Select Shipment Receipt as shown in Figure 5 - 1.

5.1.2 Select Shipment that has been released by the Transportation Engineer as shown in Figure 5 - 2.

Figure 5 - 2 – Shipment Dashboard

5.1.3 Enter receipt date from calendar and time as shown in Figure 5 - 2.

5.1.4 Select save button.

5.2 Manual Emplacement

5.2.1 Select Manual Emplacement as shown in Figure 5 - 1.

For CH Waste Handling:

A. Select the container number within the Container Available for Emplacement screen (left side) as shown in Figure 5 - 3.

B. Enter the following:

- Panel and Room Number
- Row
- Column
- Height

NOTE: **IF** emplacing a SLB2 use the next sequential row and column for emplacement. Example SLB2 is placed in rows 78 and 79 in columns 6 and 5. The emplacement should show Row 79 Column 5.

C. Select the Disposal Date from the calendar, as found in Figure 5 - 3.

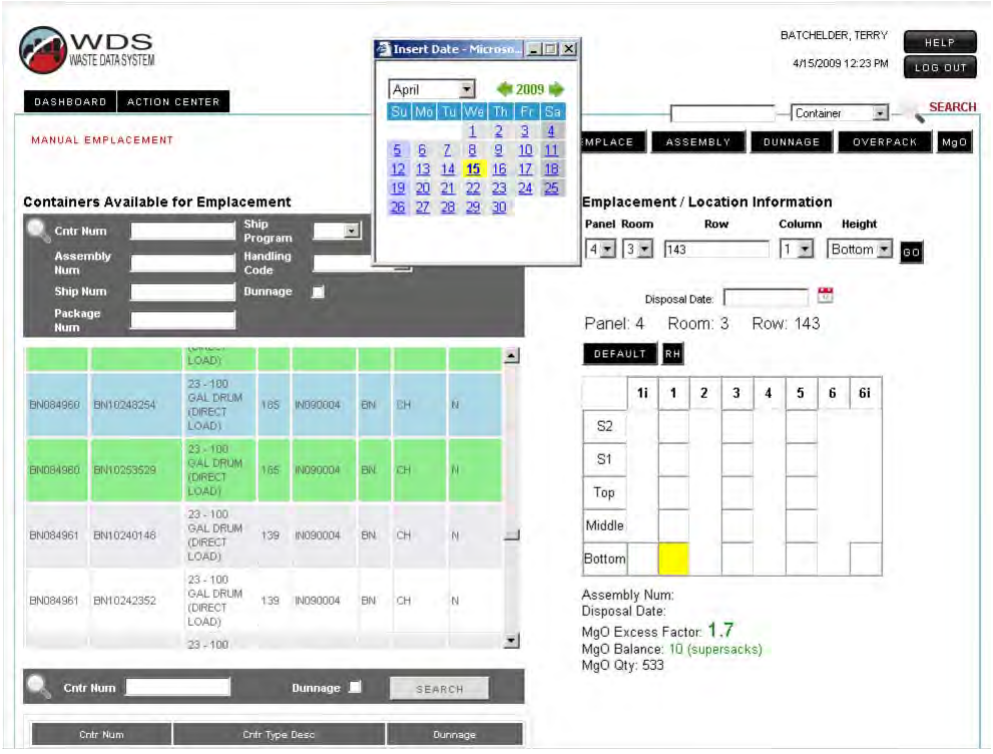


Figure 5 - 3 – CH Screen for Waste Emplacement

D. Select the emplacement button.

5.3 For RH Waste Handling

A. Select the container number within the Container Available for Emplacement screen (left side) as shown in Figure 5 - 4.

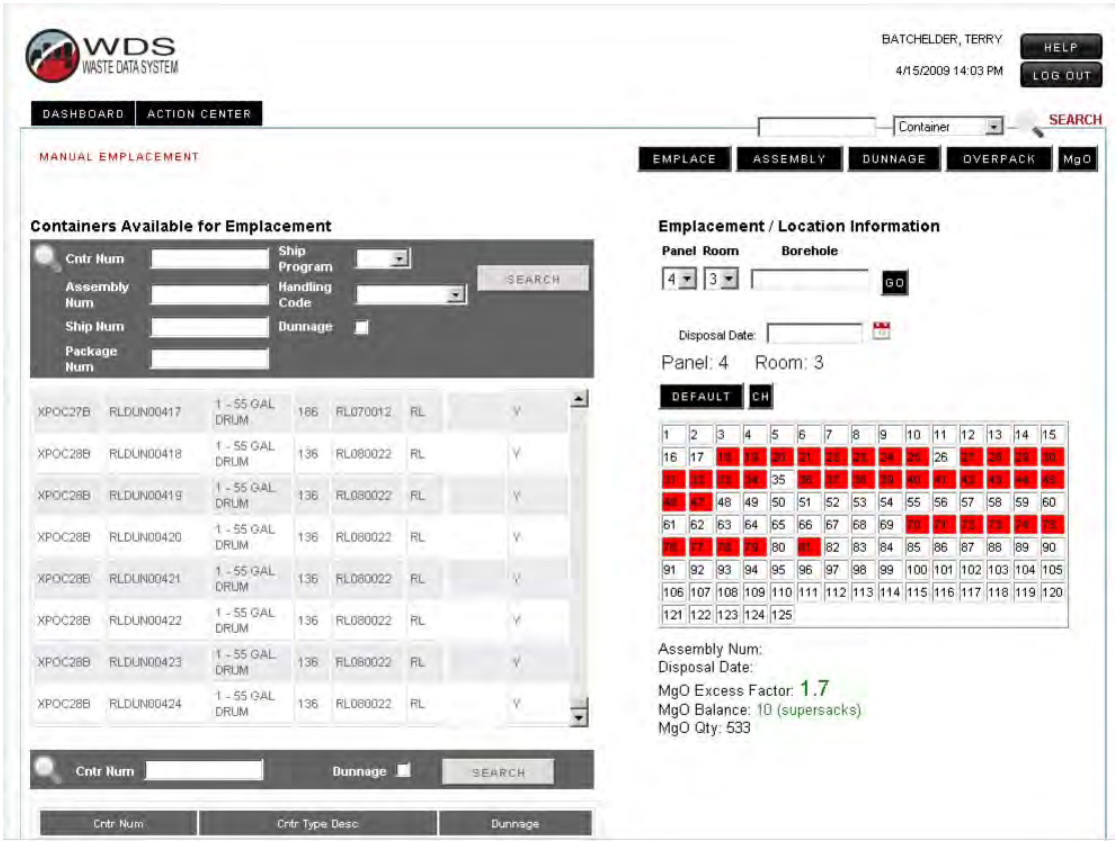


Figure 5 - 4 – RH screen for Waste Emplacement

B. Select Handling code (above room map).

C. Enter the following:

- Panel and Room Number
- Borehole
- Select the Disposal Date from the calendar, as found in Figure 5 - 3.

D. Select the emplacement button.

5.4 Overpacks

5.4.1 Create Overpack as follows:

A. Open Waste Emplacement screen.

B. Click on **Overpack** button as shown in Figure 5 - 5.

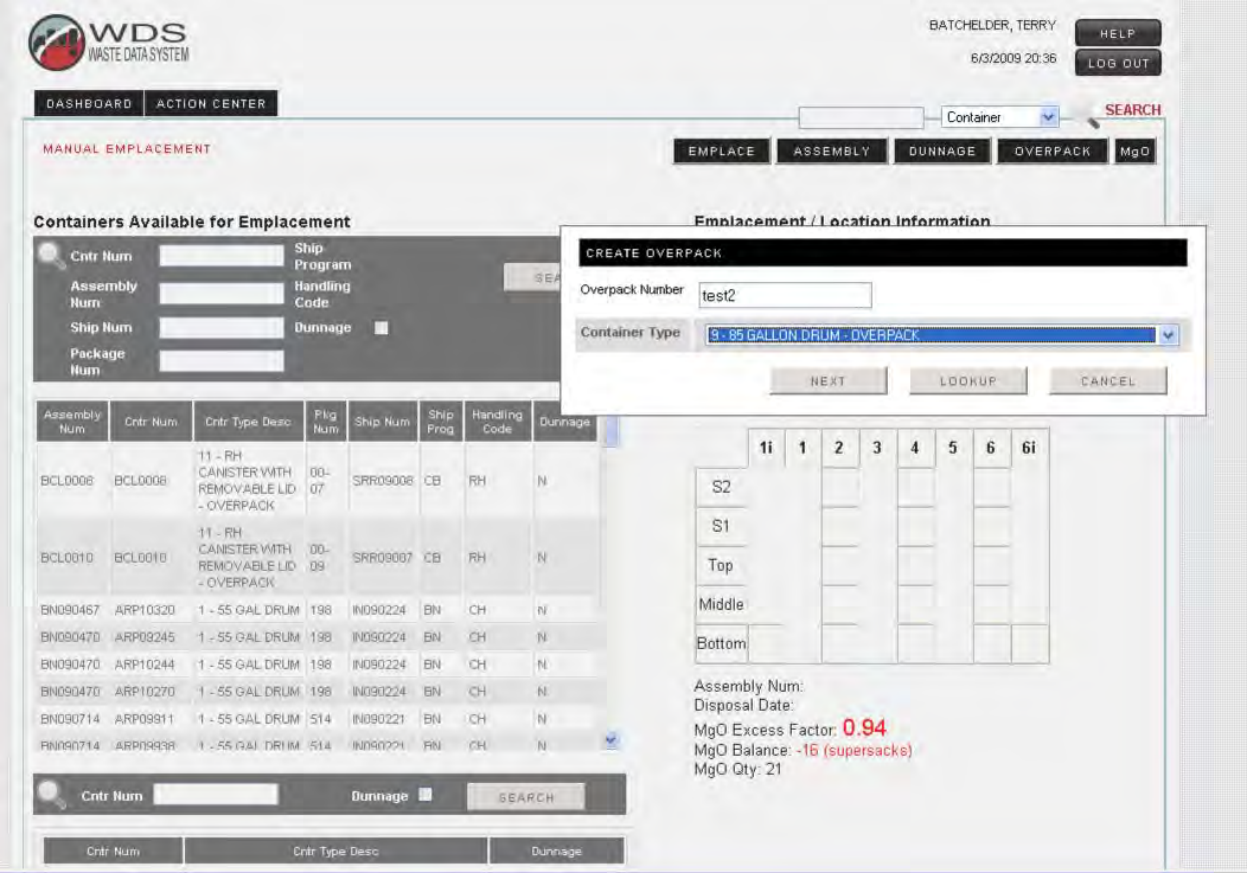


Figure 5 - 5 – Overpack Screen

C. Type in Overpack number.

D. Select Overpack container type.

E. Select **Next**.

F. Scroll down and highlight the container number(s).

G. Click on **Add container** button.

H. Click on **Create** button as shown in Figure 5 - 6.

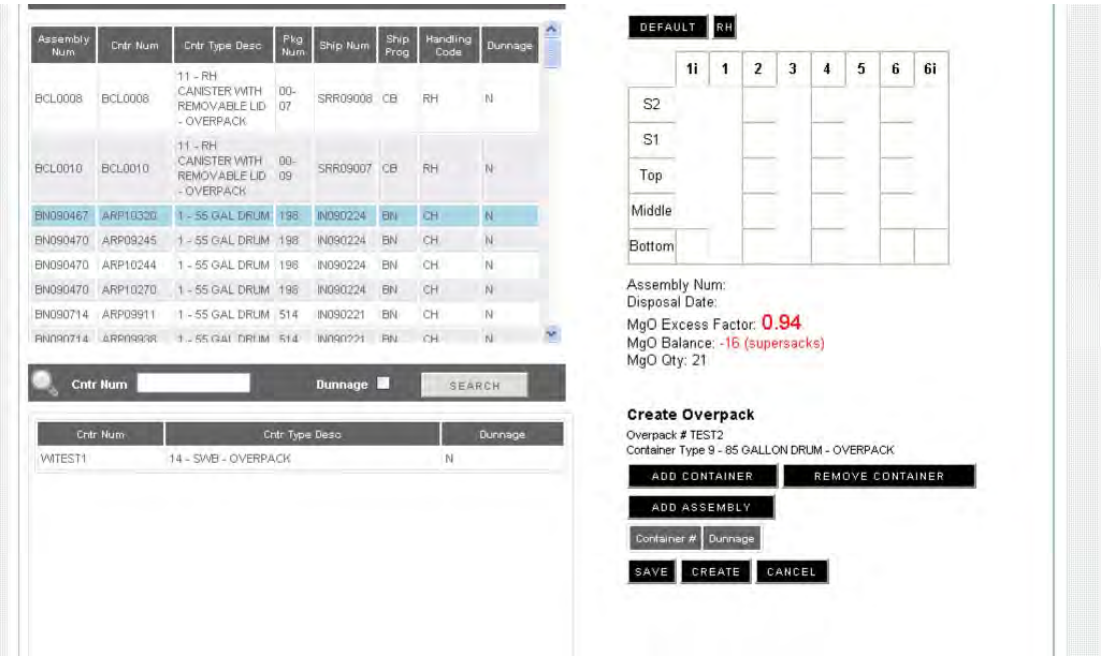


Figure 5 - 6 – Overpack Screen

5.4.2 Create an Overpack Assembly as follows:

A. Click on **Assembly** button.

B. For CH create Assembly ID Number create Assembly ID Number (WIPP site the shipment number that the containers are from WIRF070100). For RH create Assembly ID Number (WIPP Facility Cask next sequential number WIFCXXXX).

C. Highlight a Overpack Container on left side of screen and click on **Add Container** button as shown in Figure 5 - 7.

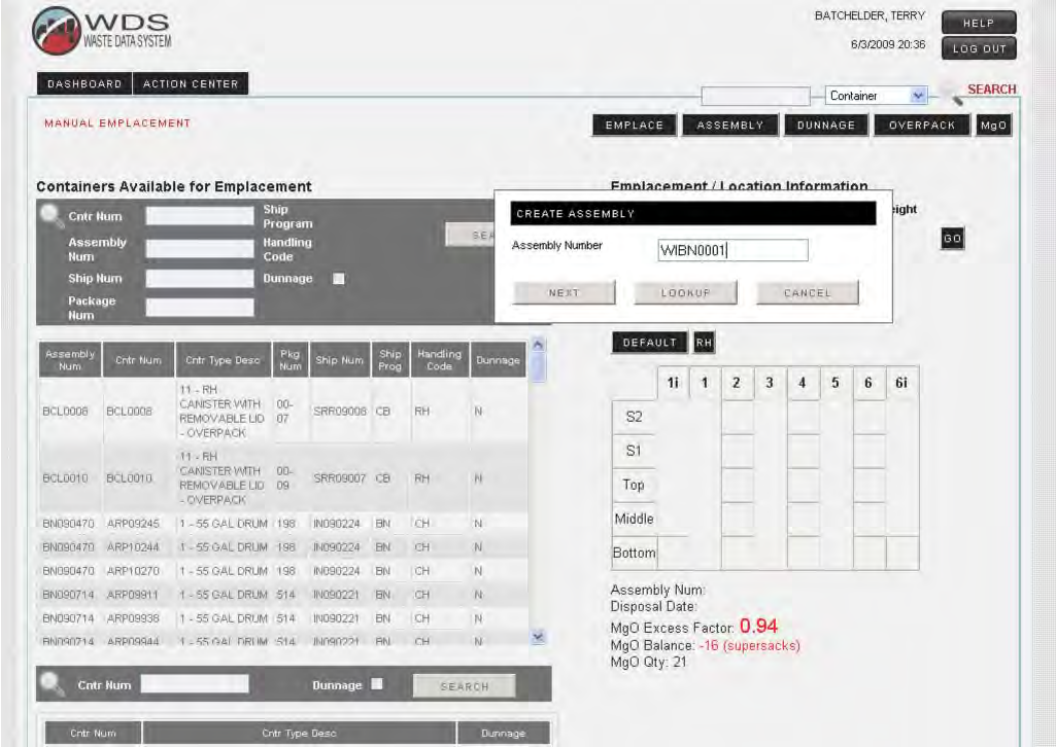


Figure 5 - 7 – Assembly Screen

D. Select Create

6.0 REPORTS

The report function lets the operator pick up to 14 types of reports.

6.1 Closure, Daily and Emplacement by Container Report

6.1.1 Select the **Panel** as shown in Figure 6 - 1.

6.1.2 Select the **Room** as shown in Figure 6 - 2.

6.1.3 Select the **Generate Report** button as shown in Figure 6 - 3.

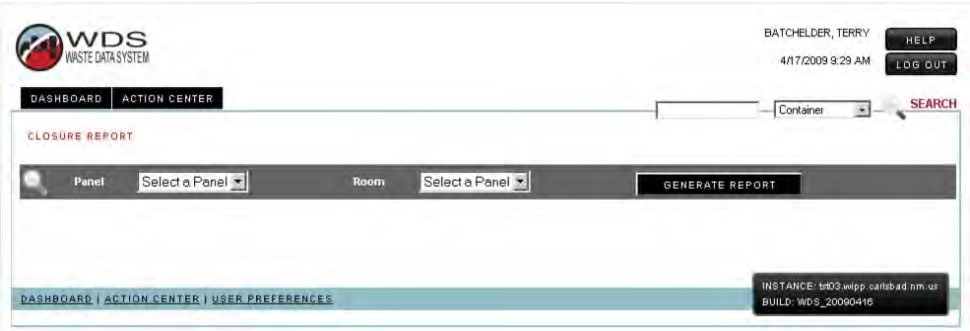
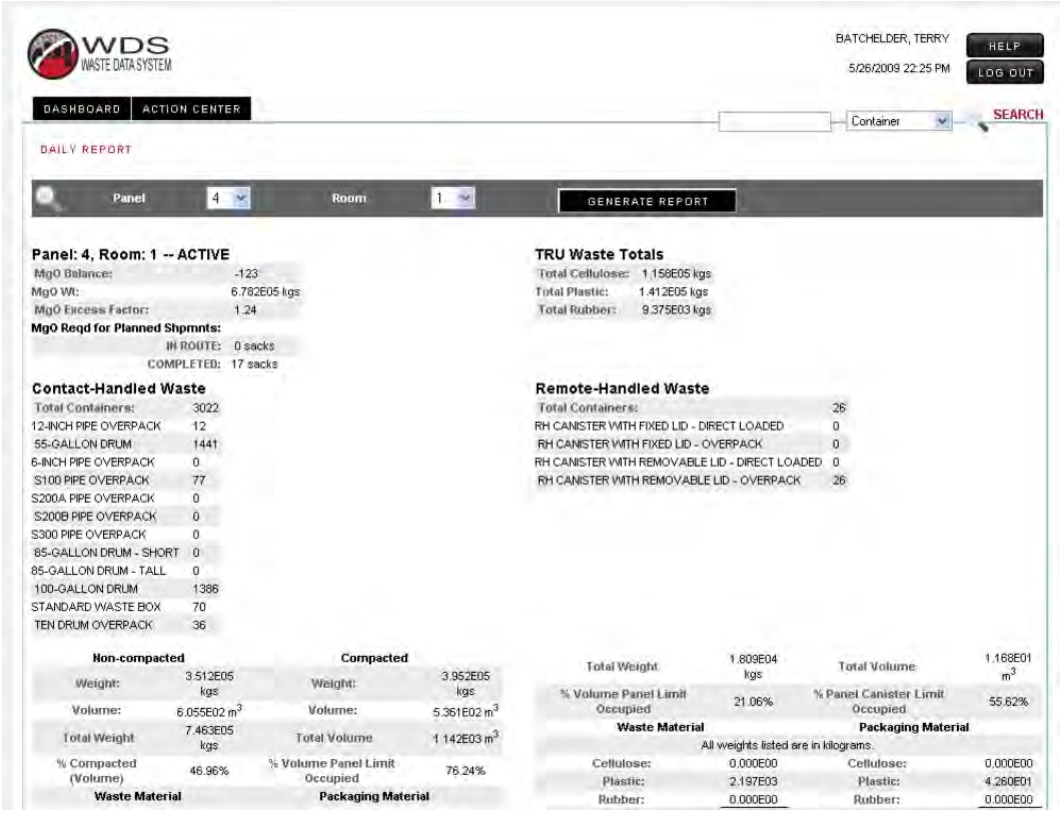


Figure 6 - 1 – Closure Report



WDS
WASTE DATA SYSTEM

BATCHELDER, TERRY
5/26/2009 22:25 PM
HELP
LOG OUT

DASHBOARD | ACTION CENTER

Container
SEARCH

DAILY REPORT

Panel 4 Room 1 GENERATE REPORT

Panel: 4, Room: 1 -- ACTIVE

MgO Balance:	-123
MgO Wt:	6.782E05 kgs
MgO Excess Factor:	1.24
MgO Reqd for Planned Shpmnts:	
IN ROUTE:	0 sacks
COMPLETED:	17 sacks

TRU Waste Totals

Total Cellulose:	1.158E05 kgs
Total Plastic:	1.412E05 kgs
Total Rubber:	9.375E03 kgs

Contact-Handled Waste

Total Containers:	3022
12-INCH PIPE OVERPACK	12
55-GALLON DRUM	1441
6-INCH PIPE OVERPACK	0
S100 PIPE OVERPACK	77
S200A PIPE OVERPACK	0
S200B PIPE OVERPACK	0
S300 PIPE OVERPACK	0
85-GALLON DRUM - SHORT	0
85-GALLON DRUM - TALL	0
100-GALLON DRUM	1386
STANDARD WASTE BOX	70
TEN DRUM OVERPACK	36

Remote-Handled Waste

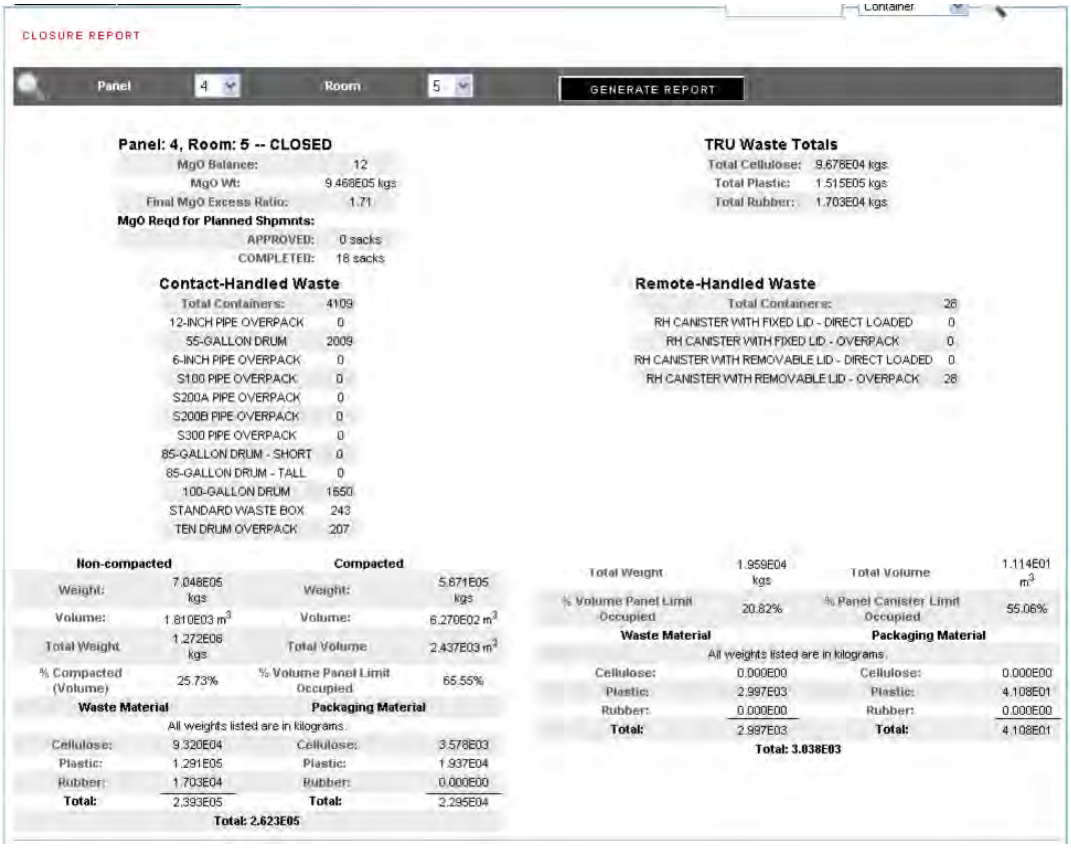
Total Containers:	26
RH CANISTER WITH FIXED LID - DIRECT LOADED	0
RH CANISTER WITH FIXED LID - OVERPACK	0
RH CANISTER WITH REMOVABLE LID - DIRECT LOADED	0
RH CANISTER WITH REMOVABLE LID - OVERPACK	26

Non-compacted		Compacted	
Weight:	3.512E05 kgs	Weight:	3.952E05 kgs
Volume:	6.055E02 m^3	Volume:	5.361E02 m^3
Total Weight	7.463E05 kgs	Total Volume	1.142E03 m^3
% Compacted (Volume)	46.96%	% Volume Panel Limit Occupied	76.24%

Total Weight	1.809E04 kgs	Total Volume	1.168E01 m^3
% Volume Panel Limit Occupied	21.06%	% Panel Canister Limit Occupied	55.62%

Waste Material		Packaging Material	
All weights listed are in kilograms.			
Cellulose:	0.000E00	Cellulose:	0.000E00
Plastic:	2.197E03	Plastic:	4.260E01
Rubber:	0.000E00	Rubber:	0.000E00

Figure 6 - 2 – Daily Report



Container

CLOSURE REPORT

Panel 4 Room 5 GENERATE REPORT

Panel: 4, Room: 5 -- CLOSED

MgO Balance:	12
MgO Wt:	9.468E05 kgs
Final MgO Excess Ratio:	1.71
MgO Reqd for Planned Shpmnts:	
APPROVED:	0 sacks
COMPLETED:	18 sacks

TRU Waste Totals

Total Cellulose:	9.678E04 kgs
Total Plastic:	1.515E05 kgs
Total Rubber:	1.703E04 kgs

Contact-Handled Waste

Total Containers:	4109
12-INCH PIPE OVERPACK	0
55-GALLON DRUM	2009
6-INCH PIPE OVERPACK	0
S100 PIPE OVERPACK	0
S200A PIPE OVERPACK	0
S200B PIPE OVERPACK	0
S300 PIPE OVERPACK	0
85-GALLON DRUM - SHORT	0
85-GALLON DRUM - TALL	0
100-GALLON DRUM	1650
STANDARD WASTE BOX	243
TEN DRUM OVERPACK	207

Remote-Handled Waste

Total Containers:	28
RH CANISTER WITH FIXED LID - DIRECT LOADED	0
RH CANISTER WITH FIXED LID - OVERPACK	0
RH CANISTER WITH REMOVABLE LID - DIRECT LOADED	0
RH CANISTER WITH REMOVABLE LID - OVERPACK	28

Non-compacted		Compacted	
Weight:	7.048E05 kgs	Weight:	5.671E05 kgs
Volume:	1.810E03 m^3	Volume:	6.270E02 m^3
Total Weight	1.272E06 kgs	Total Volume	2.437E03 m^3
% Compacted (Volume)	25.73%	% Volume Panel Limit Occupied	65.55%

Total Weight	1.959E04 kgs	Total Volume	1.114E01 m^3
% Volume Panel Limit Occupied	20.82%	% Panel Canister Limit Occupied	55.06%

Waste Material		Packaging Material	
All weights listed are in kilograms.			
Cellulose:	9.320E04	Cellulose:	3.578E03
Plastic:	1.291E05	Plastic:	1.937E04
Rubber:	1.703E04	Rubber:	0.000E00
Total:	2.393E05	Total:	2.295E04
	Total: 2.623E05		

Waste Material		Packaging Material	
All weights listed are in kilograms.			
Cellulose:	0.000E00	Cellulose:	0.000E00
Plastic:	2.997E03	Plastic:	4.108E01
Rubber:	0.000E00	Rubber:	0.000E00
Total:	2.997E03	Total:	4.108E01
	Total: 3.038E03		

Figure 6 - 3 – Closure Report

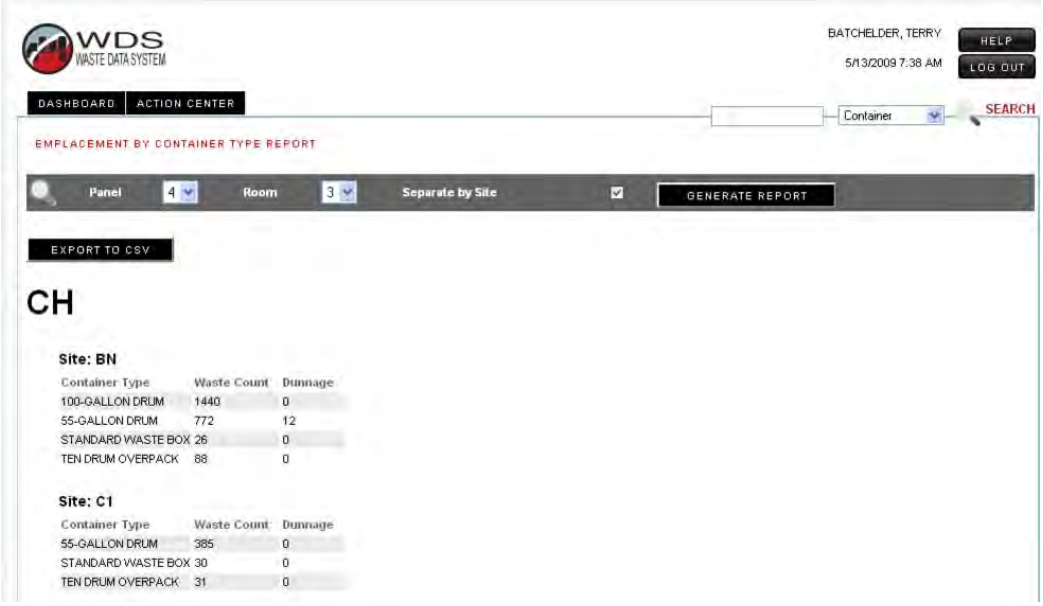


Figure 6 - 4 – Emplacement by Container

6.2 Daily Emplacement Volume, and MgO Excess Factor

6.2.1 Select the **Panel**.

6.2.2 Select the **Room**.

6.2.3 Select **Start Date**.

6.2.4 Select **End Date**.

6.2.5 Select the **Generate Report** button as shown in Figure 6 - 5 and Figure 6 - 6.

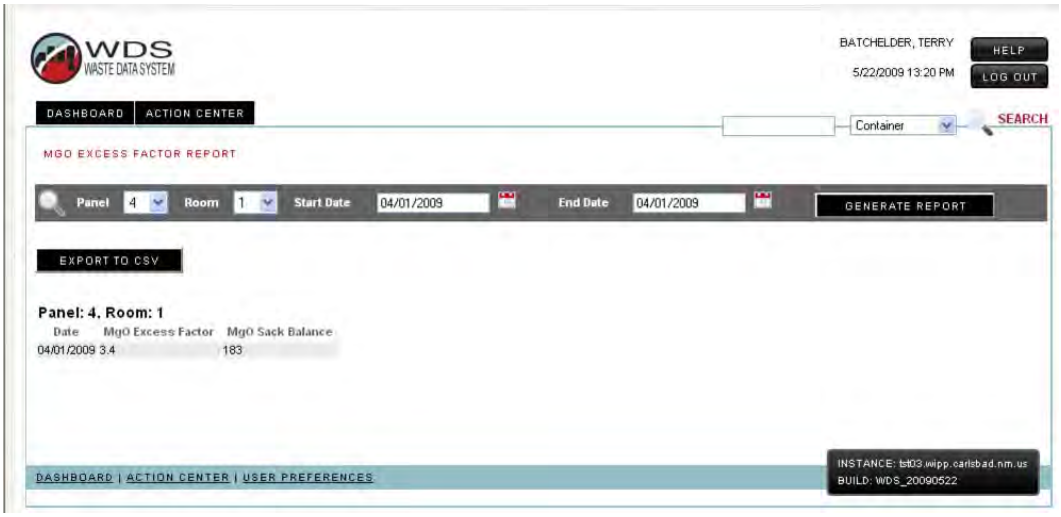


Figure 6 - 5 – Mgo Excess Factor

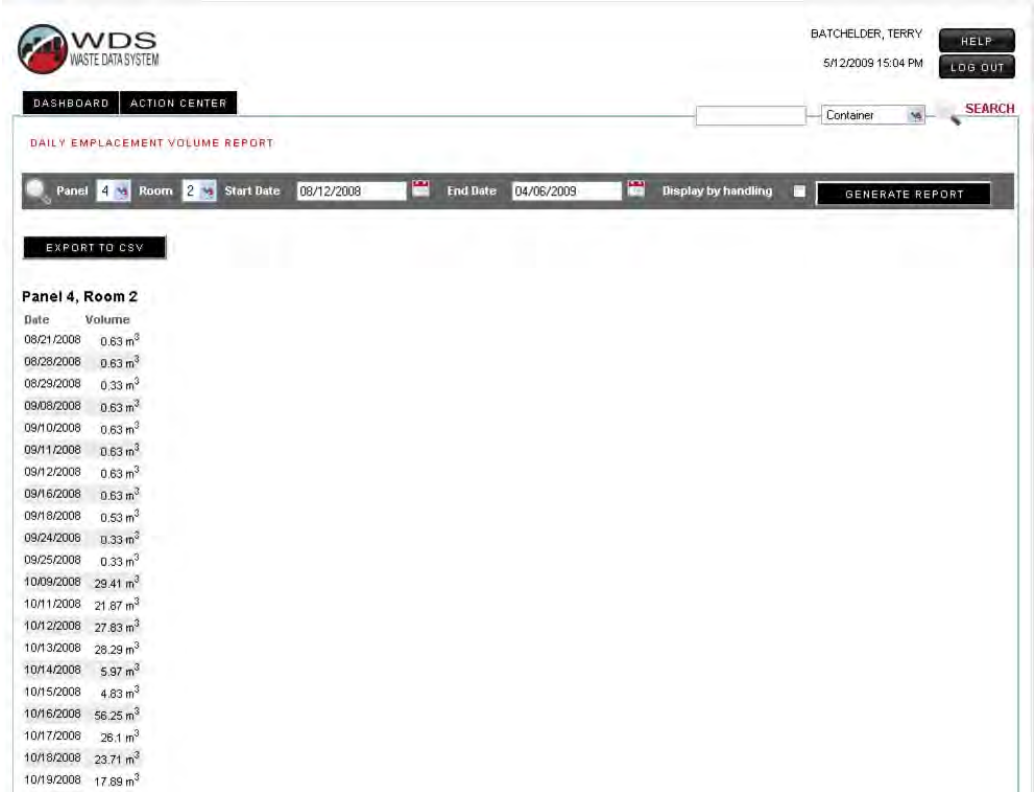


Figure 6 - 6 – Daily Emplacement Volume

6.3 Emplacement History Overview

6.3.1 Select the **Panel** as shown in Figure 6 - 7.

6.3.2 Select the **Generate Report** button as shown in Figure 6 - 7.

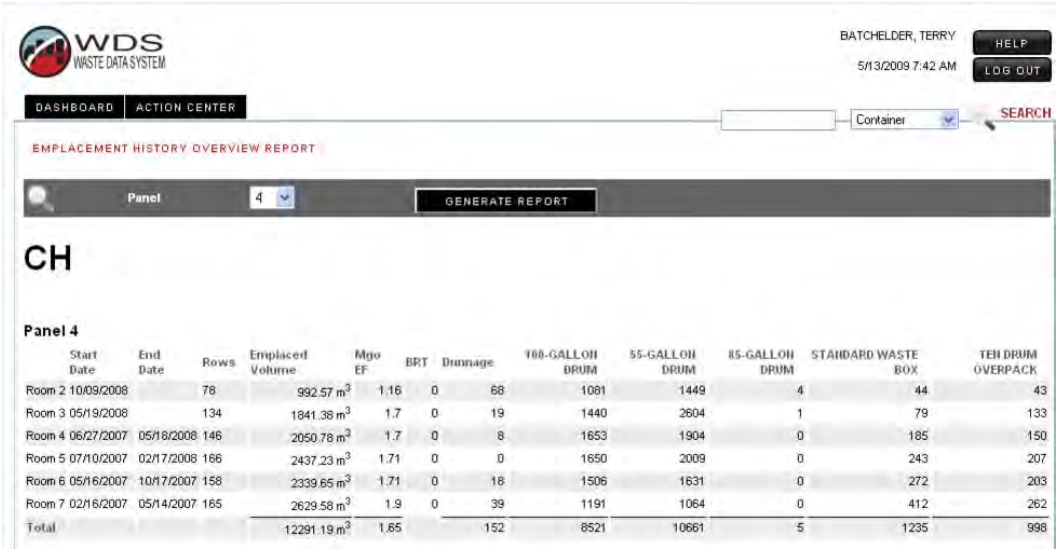


Figure 6 - 7 – Emplacement History

6.4 Monthly Annual Emplacement Comparison Graph

6.4.1 Select the **Year** as shown in Figure 6 - 8.

6.4.2 Select the **Generate Report** button as shown in Figure 6 - 8.

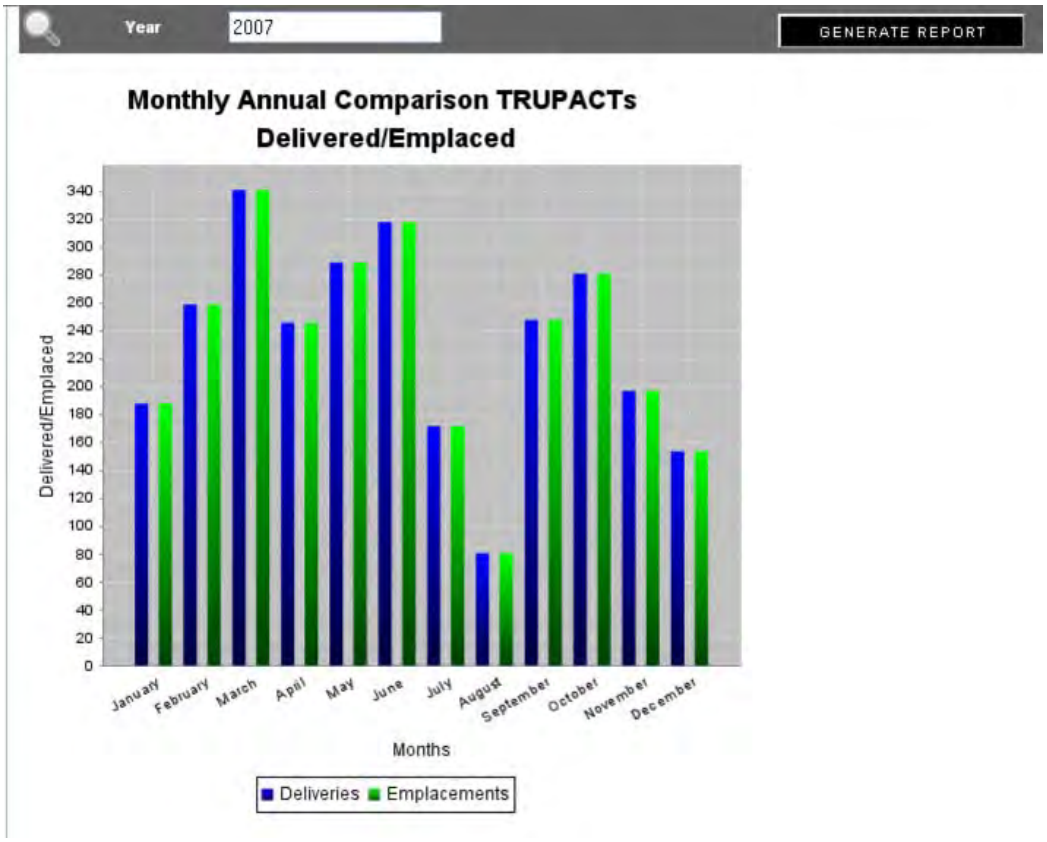


Figure 6 - 8 – Monthly Annual Emplacement Comparison Graph

6.5 Plot CH Emplacement Excess Factor and Volume Used

6.5.1 Select the **Year** as shown in Figure 6 - 9.

6.5.2 Select **Start Date** as shown in Figure 6 - 9.

6.5.3 Select **End Date** as shown in Figure 6 - 9.

6.5.4 Select the **Generate Report** button as shown in Figure 6 - 9.

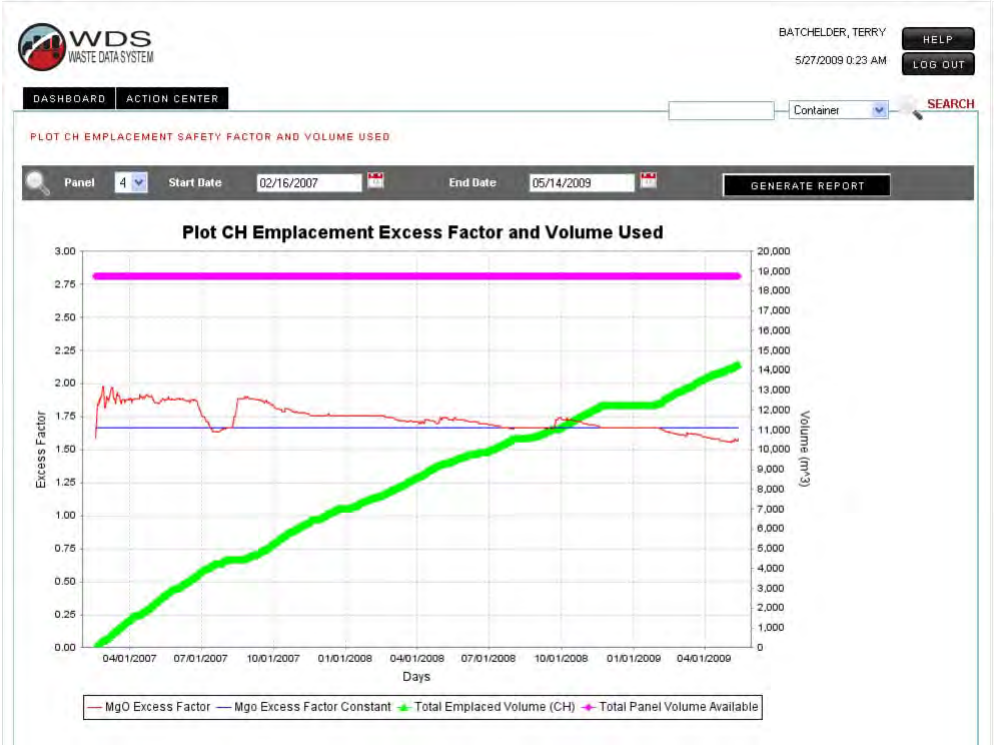


Figure 6 - 9 – Plot CH Emplacement Safety Factor and Volume Used

6.6 Reference Table

6.6.1 For definitions of this table go to procedure DOE/WIPP-08-3427.

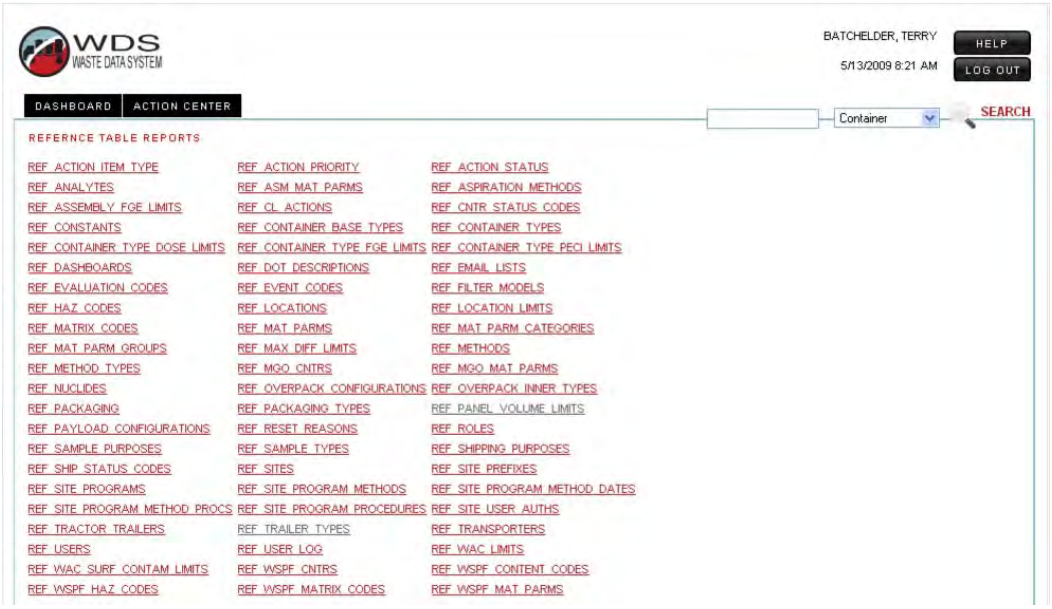


Figure 6 - 10 – Reference Table

6.7 Room Map

6.7.1 Select **Handling Code** (CH or RH).

6.7.2 Select **Panel**.

6.7.3 Select **Room**.

6.7.4 Select **Rows**.

6.7.5 Select **Generate Report** as shown in Figure 6 - 11.

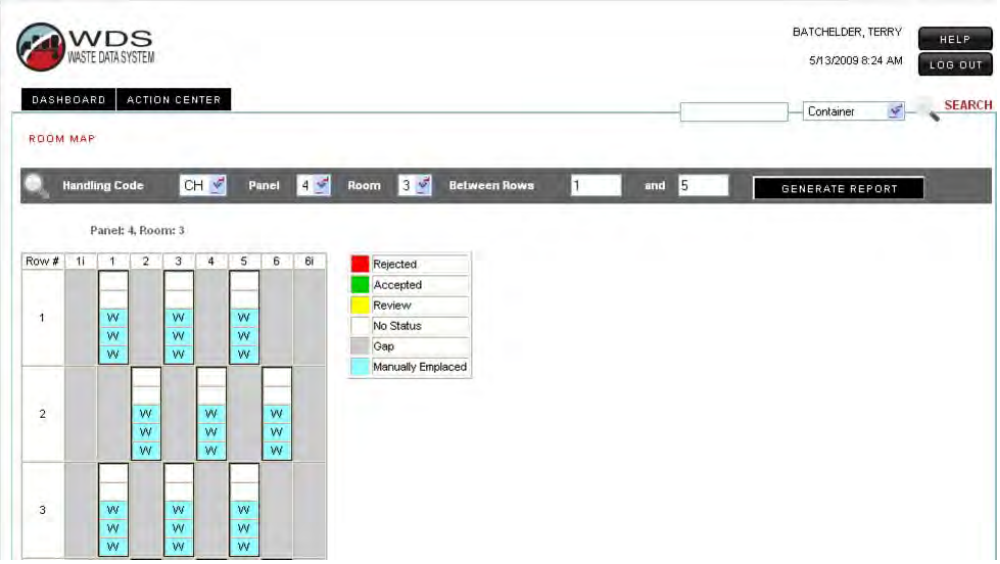


Figure 6 - 11 – Room Map

6.8 Shipment Summary

6.8.1 Select **Shipment**.

6.8.2 Select **Generate Report**.

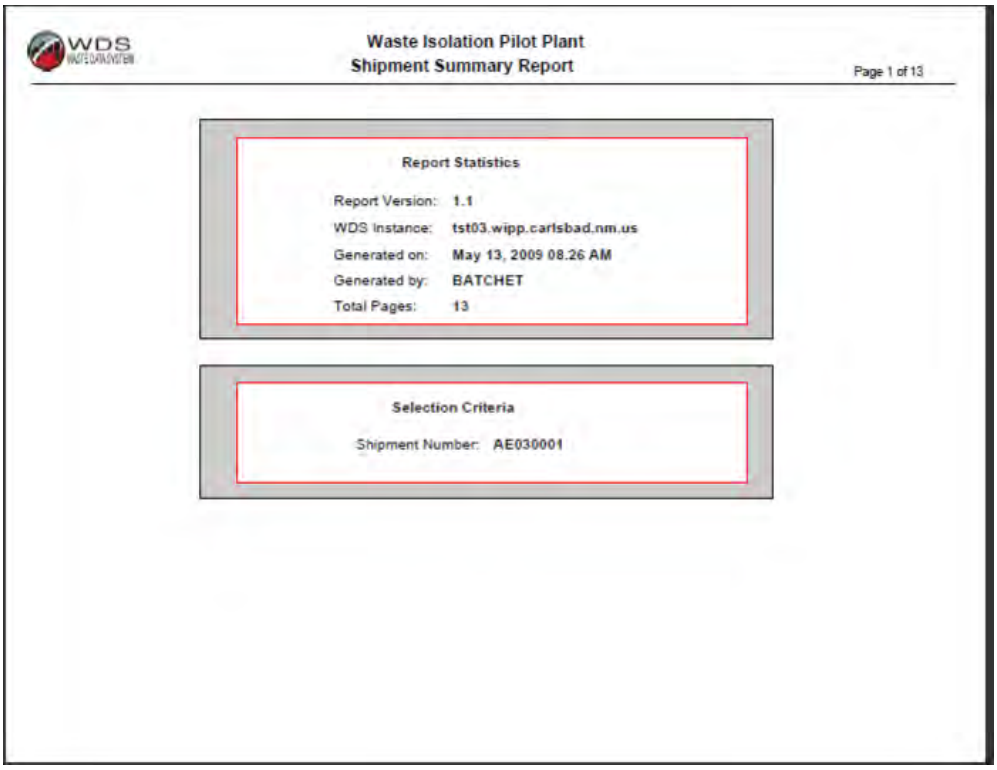


Figure 6 - 12 – Shipment Summary

6.9 Waste Emplacement

6.9.1 Select **Start Date**.

6.9.2 Select **End Date**.

6.9.3 Select **Generate Report** as shown in Figure 6 - 13.

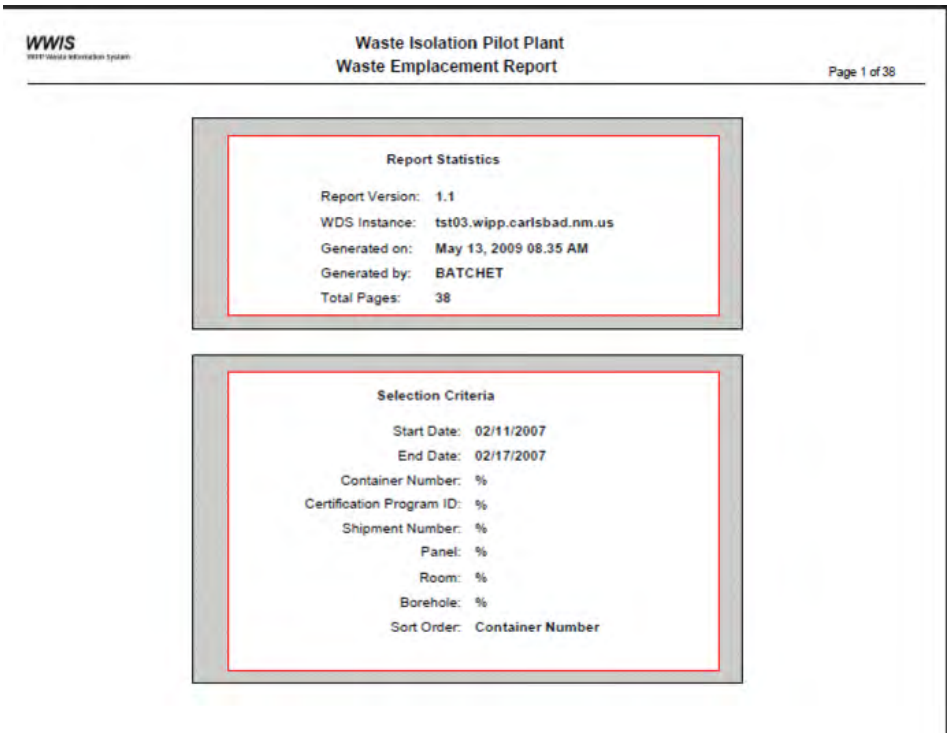


Figure 6 - 13 – Waste Emplacement

6.10 Weekly Shipment and Emplacement

6.10.1 Select **Handling Code** (CH or RH).

6.10.2 Select **Start Date**.

6.10.3 Select **Generate Report** as shown in Figure 6 - 14.

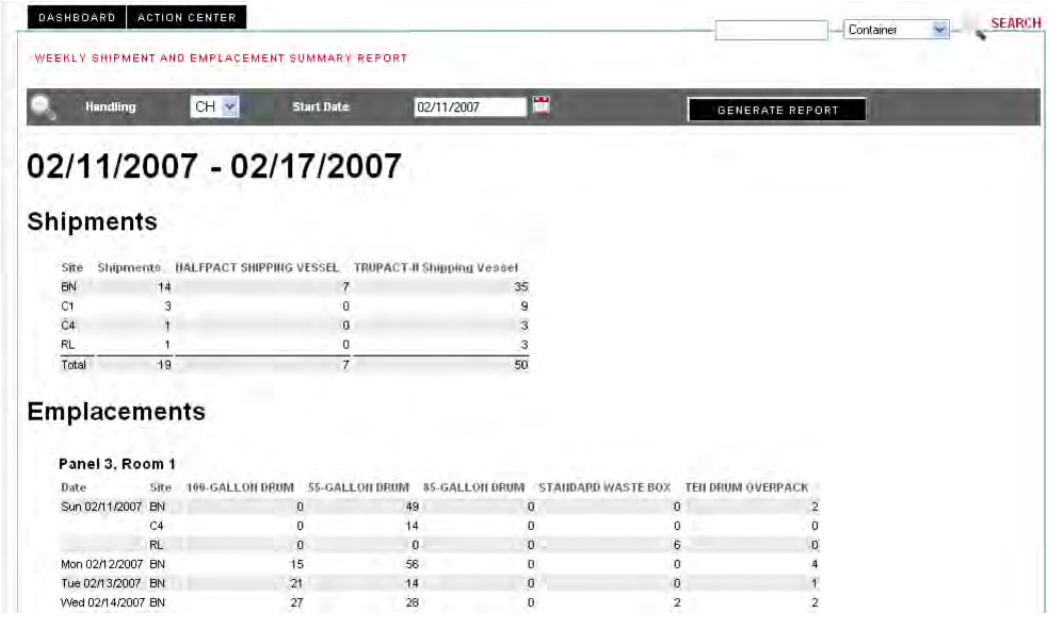
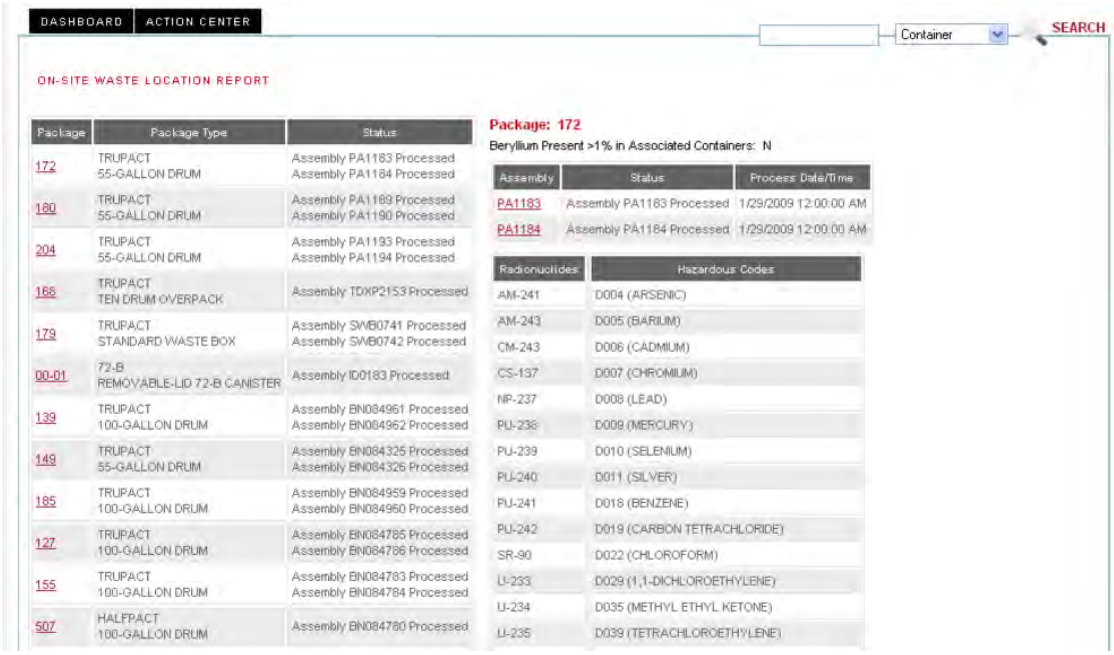


Figure 6 - 14 Weekly Shipment and Emplacement

6.10.4 On-Site Waste Location

This report displays the locations of all TRU waste packages in "received, in process and not emplaced." When a package is selected it will open up to the assembly numbers.



Package	Package Type	Status
172	TRUPACT 55-GALLON DRUM	Assembly PA1183 Processed Assembly PA1184 Processed
180	TRUPACT 55-GALLON DRUM	Assembly PA1189 Processed Assembly PA1190 Processed
204	TRUPACT 55-GALLON DRUM	Assembly PA1193 Processed Assembly PA1194 Processed
168	TRUPACT TEN DRUM OVERPACK	Assembly TDXP2153 Processed
179	TRUPACT STANDARD WASTE BOX	Assembly SWB0741 Processed Assembly SWB0742 Processed
00-01	72-B REMOVABLE-LID 72-B CANISTER	Assembly ID0183 Processed
139	TRUPACT 100-GALLON DRUM	Assembly BN084961 Processed Assembly BN084962 Processed
149	TRUPACT 55-GALLON DRUM	Assembly BN084325 Processed Assembly BN084326 Processed
185	TRUPACT 100-GALLON DRUM	Assembly BN084959 Processed Assembly BN084960 Processed
127	TRUPACT 100-GALLON DRUM	Assembly BN084785 Processed Assembly BN084786 Processed
155	TRUPACT 100-GALLON DRUM	Assembly BN084783 Processed Assembly BN084784 Processed
507	HALFPACT 100-GALLON DRUM	Assembly BN084780 Processed

Assembly	Status	Process Date/Time
PA1183	Assembly PA1183 Processed	1/29/2009 12:00:00 AM
PA1184	Assembly PA1184 Processed	1/29/2009 12:00:00 AM

Radionuclides	Hazardous Codes
AM-241	D004 (ARSENIC)
AM-243	D005 (BARIUM)
CM-243	D006 (CADMIUM)
CS-137	D007 (CHROMIUM)
NP-237	D008 (LEAD)
PU-238	D009 (MERCURY)
PU-239	D010 (SELENIUM)
PU-240	D011 (SILVER)
PU-241	D018 (BENZENE)
PU-242	D019 (CARBON TETRACHLORIDE)
SR-90	D022 (CHLOROFORM)
U-233	D029 (1,1-DICHLOROETHYLENE)
U-234	D035 (METHYL ETHYL KETONE)
U-235	D039 (TETRACHLOROETHYLENE)

Figure 6 - 15 – On-Site Waste Location

7.0 BAR CODES

Bar code is a labeling type for tracking all specific types of waste containers.

7.1 Create Bar Code Labels

When creating bar code labels use a 3 to 9 pitch font and using medium to low density Code 39 bar code symbology. In characters at least 1 inch high and alphanumeric characters at least 1/2 inch high.

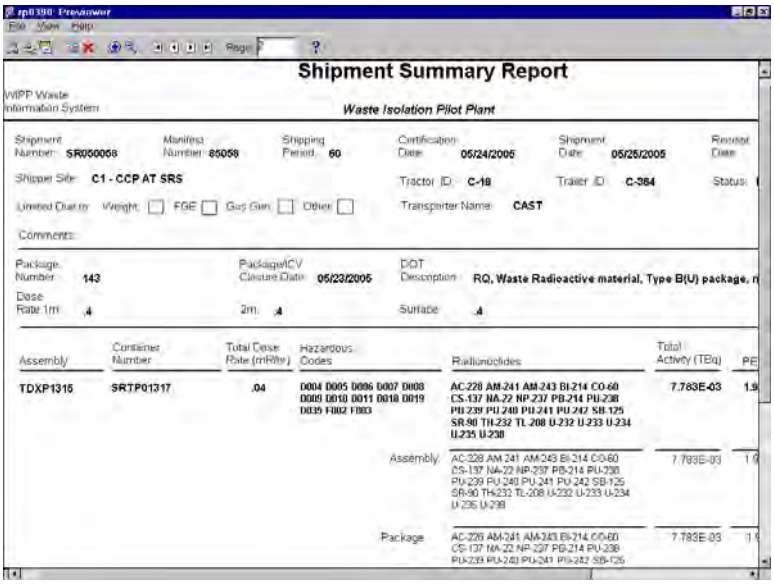
7.1.1 Create a bar code using the following format and example:

- <Asterisk><container ID><Asterisk>
- *LASBDUN199*

7.1.2 On all drums, a minimum of three bar code labels shall be placed at equal intervals around the barrels. On SWBs, a bar code label will be placed on the flat sides of the SWB. On the TDOP, a minimum of one bar code label is required.

7.2 Verification

7.2.1 For CH packaging operators IF bar code reader is not working, visually verify payload container numbers against WWIS/WDS Shipment Summary Report as shown in Figure 7 - 1 and Figure 7 - 2. For RH packaging operators, visually verify payload container numbers against WWIS/WDS Shipment Summary Report.



Shipment Summary Report

WIPP Waste Information System — *Waste Isolation Pilot Plant*

Shipment Number: SR050058 | Manifest Number: 85058 | Shipping Period: 60 | Certification Date: 05/24/2005 | Shipment Date: 05/25/2005 | Receipt Date:

Shipper Site: C1 - CCP AT SRS | Tractor ID: C-18 | Trailer ID: C-384 | Status:

Limited Quantity | Weight | FGE | Gas Gen | Other | Transporter Name: CAST

Comments:

Package Number: 143 | Package/CV Closure Date: 05/23/2005 | DOT Description: RQ, Waste Radioactive material, Type B(U) package, n

Dose Rate 1m: .4 | 2m: .4 | Surface: .4

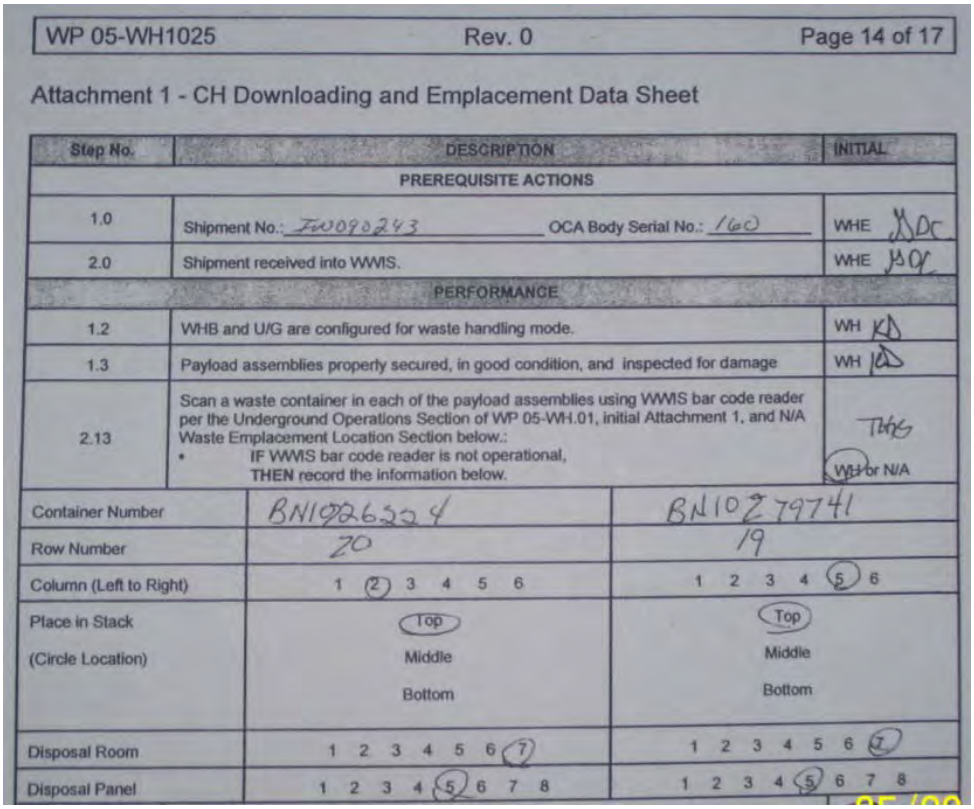
Assembly	Container Number	Total Dose Rate (mRem)	Hazardous Codes	Radionuclides	Total Activity (TEq)	PE
TDXP1315	SRTP01317	.04	D004 D005 D006 D007 D008 D009 D010 D011 D018 D019 D035 F002 F003	AC-228 AM-241 AM-243 BI-214 CO-60 CS-137 NA-22 NP-237 PB-214 PU-238 PU-239 PU-240 PU-241 PU-242 SB-125 SR-90 TH-232 TL-208 U-232 U-233 U-234 U-235 U-238	7.783E-03	1.9
				Assembly: AC-228 AM-241 AM-243 BI-214 CO-60 CS-137 NA-22 NP-237 PB-214 PU-238 PU-239 PU-240 PU-241 PU-242 SB-125 SR-90 TH-232 TL-208 U-232 U-233 U-234 U-235 U-238	7.783E-03	1.9
				Package: AC-228 AM-241 AM-243 BI-214 CO-60 CS-137 NA-22 NP-237 PB-214 PU-238 PU-239 PU-240 PU-241 PU-242 SB-125	7.783E-03	1.9

Figure 7 - 1 – CH WWIS Shipment Summary Report

Figure 7 - 2 – CH WWIS Bar Code Label

7.2.2 For CH operators, enter the emplaced container number from Attachment 1 of WP 05-WH1025 and visually verify payload container number(s) entered are the same as Attachment 1 of WP 05-WH1025 as shown in Figure 7 - 3.

7.2.3 For RH operators, enter the emplaced 72-B container number from Attachment 1 of WP 05-WH1710 and visually verify payload container number(s) entered are the same as Attachment 1 of WP 05-WH1710.



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Attachment 1 - CH Downloading and Emplacement Data Sheet

Step No.	DESCRIPTION	INITIAL
	PREREQUISITE ACTIONS	
1.0	Shipment No.: FW090243 OCA Body Serial No.: 160	WHE JDC
2.0	Shipment received into WWIS.	WHE JDC
	PERFORMANCE	
1.2	WHB and U/G are configured for waste handling mode.	WH KD
1.3	Payload assemblies properly secured, in good condition, and inspected for damage	WH KD
2.13	Scan a waste container in each of the payload assemblies using WWIS bar code reader per the Underground Operations Section of WP 05-WH.01, initial Attachment 1, and N/A Waste Emplacement Location Section below.: • IF WWIS bar code reader is not operational, THEN record the information below.	THS WH or N/A

Container Number	BN1926324	BN1079741
Row Number	20	19
Column (Left to Right)	1 (2) 3 4 5 6	1 2 3 4 (5) 6
Place in Stack (Circle Location)	(Top) Middle Bottom	(Top) Middle Bottom
Disposal Room	1 2 3 4 5 6 (7)	1 2 3 4 5 6 (7)
Disposal Panel	1 2 3 4 (5) 6 7 8	1 2 3 4 (5) 6 7 8

Figure 7 - 3 – Example CH Downloading and Emplacement Data Sheet

8.0 BAR CODE READER

Button Descriptions	
	The *Unload* button is used to access the Shipment Unload Screen and all functionality required to unload shipments as shown in section 8.2.
	The *Emplace* button is to access the Emplacement Screen and all functionality required to emplace waste containers, dunnage assemblies, and MgO sacks as shown in section 8.3.
	The *Review* button is to access the Emplacement Location Review Screen and all functionality required to review and validate the accuracy of emplacement location data for waste containers, dunnage assemblies, and MgO sacks.
	The *Reports* button is to access the Report Selection Screen and choose the report type desired (Daily Report, Room Closure Report, MgO Balance Report, or Graphical Room Display Report).
	The *Logout* button is to logout of the system and return to the login screen at any time.
	The *Home* button is to return to the Home screen at any time.
	The *Back* button is to return to the previous Screen at any time.

8.1 Logon

8.1.1 Type in username.

8.1.2 Type in password.

8.1.3 Press **Login** button as shown in Figure 8 - 1.

Figure 8 - 1 – WIPP Emplacement Tracking Software

8.2 Surface Operation

8.2.1 Select the **Unload** button.

8.2.2 Select Shipment/Package from the pull-down screen as shown in Figure 8 - 2.

Figure 8 - 2 – Topside Package Unload

8.2.3 Press Display button as shown in Figure 8 - 2.

8.2.4 Scan or enter bar code number as shown in Figure 8 - 3.

Figure 8 - 3 – Barcode Screen

8.2.5 Press the **Validate** button as shown in Figure 8 - 3.

A. If the container number and assembly number match, press the Accept button as shown in Figure 8 - 4.

Figure 8 - 4 – Accept/Reject Screen

B. If the **Reject** button the assembly must be pressed, go to section 8.5 to reset bar code system.

8.2.6 If another assembly needs to be scanned, press **New Package** button as shown in Figure 8 - 5.

Figure 8 - 5 – Update Screen

8.3 Underground Operations

8.3.1 Container Emplacement

A. Select the **Emplace** button.

B. Scan or enter container number.

C. Press **Show** button.

NOTE: **IF** the container ID has been already emplaced, the system will show where it has been emplaced.

NOTE: **IF** emplacing a SLB2 use the next sequential row and column for emplacement. Example SLB2 is placed in rows 78 and 79 in columns 6 and 5. The emplacement should show Row 79 Column 5.

D. Select panel and room number from the pull-down screen, and

- Enter row number
- Enter column number
- Enter height location

E. Press **Save Cntr** button as shown in Figure 8 - 6.

Figure 8 - 6 – Emplacement Screen

8.3.2 Dunnage Emplacement

A. Select panel and room number from the pull-down screen, and

- Enter row number
- Enter column number
- Enter height location

B. Press **Dunnage** button as shown in Figure 8 - 6.

8.3.3 MgO Emplacement

A. Select panel and room number from the pull-down screen, and

- Enter row number
- Enter column number (if an MgO sack is being emplaced on top of a column, use the S1 location; if a column of MgO is being emplaced, use the bottom location)
- Enter height location

B. Press **SELECT MgO** button as shown in Figure 8 - 6.

C. Select either 4,200 lb sacks or a 3,000 lb sack.

D. Press Save MgO button.

8.3.4 Emplacement Location Review

A. Select the **Review** button.

B. Enter the following:

- Panel and room number
- Row location
- Column location
- Height location

C. Press the **Review** button as shown in Figure 8 - 7.

Figure 8 - 7 – Emplacement Review Screen

8.3.5 Location Accept/Reject

A. If all information is correct, press the **Accept** button to accept the location data as shown in Figure 8 - 8.

B. If the information is incorrect, press the **Reject** button to reject the location data as shown in Figure 8 - 8.

Figure 8 - 8 – Accept/Reject Screen

8.4 Reports

8.4.1 MgO Balance

A. Select the **Balance** button.

B. Select panel and room number from the pull-down screen.

C. Press **Run** button.

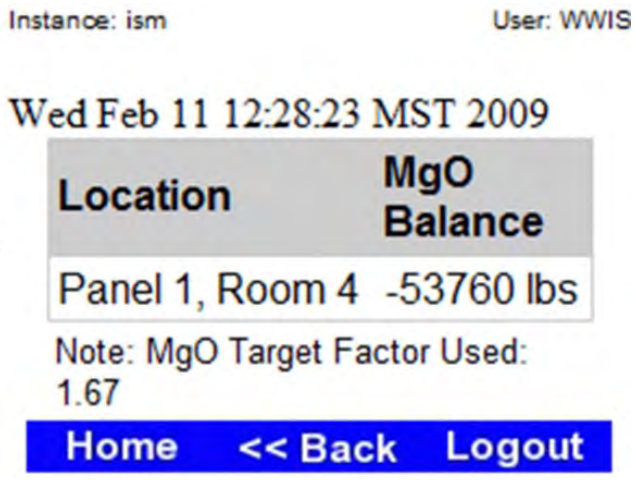


Figure 8 - 9 – MgO Balance Screen

8.4.2 Room Display

A. Select the **Room Display** button.

B. Select panel and room number from the pull-down screen.

C. Enter beginning row and ending row as shown in Figure 8 - 10.

D. Press **Run** button as shown in Figure 8 - 10.

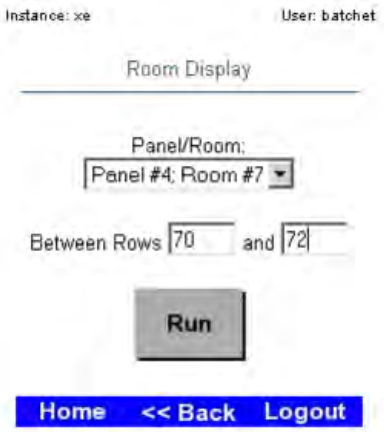


Figure 8 - 10 – Room Display Entry Screen

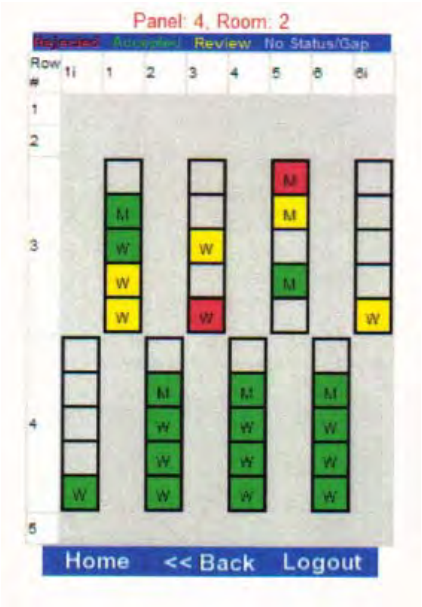


Figure 8 - 11 – Room Display Screen

8.5 Supervisor Screen

A supervisor screen will show if there is a shipment reject or an assembly reject. This will have to be done to reset the bar code system.

8.5.1 Enter "Supervisor" into the Supervisor field.

8.5.2 Enter the password in the Password field.

NOTE: The bar code reader password will be given out by Integrated Waste Operations management.

8.5.3 Press the reset button as shown in Figure 8 - 12.

Figure 8 - 12 – Supervisor Screen

8.6 Changing Batteries

8.6.1 Prior to removing the battery, press the red power button to turn off the screen. This sets the scanner to suspend mode.

8.6.2 Simultaneously press both primary battery releases. The battery partially ejects from the scanner. Pause 3-4 seconds while the scanner performs battery removal shutdown as shown in Figure 8 - 13.

8.6.3 Press secondary battery release, on top of the battery, and slide the battery out of the scanner as shown in Figure 8 - 13.

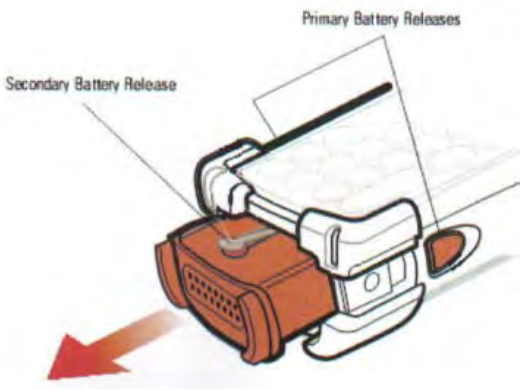


Figure 8 - 13 – Scanner

NOTE: When installing the battery, two audible clicks can be heard.

9.0 MISCELLANEOUS

9.1 Moving of emplaced assemblies or MgO sack

9.1.1 Manual Emplacement screen

A. Select the row that the assembly or MgO sack was placed in.

B. Select the row that the assembly or MgO sack will be placed in.

C. Ensure that the correct disposal date is listed.

D. Select Move button.

9.1.2 Barcode reader

A. Scan the container number.

B. Select the Show button.

C. Enter new location.

D. Ensure that the correct disposal date is listed.

E. Select Move button.

10.0 TRAINING

All WDS users shall receive on-the-job training (OJT) specific to the WDS. Other personnel who have access to the WDS will be provided training to support the work they are assigned to perform in accordance with site-specific procedures.

Training on the contents of this procedure is provided as a required reading OJT activity.

An excellent resource on using the WDS is this WDS User's Manual. Routine training/orientation for new users should be provided by experienced users. Training for major modifications will be provided on an as-needed basis. Special training will be available on a case-by-case basis.

11.0 REFERENCES

DOE/WIPP 02-3122, *Contact-Handled Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant*

DOE/WIPP-09-3427, *Waste Data System User's Manual*

WP 05-WH1011, *CH Waste Processing*

WP 05-WH1025, *CH Downloading and Emplacement*

WP 05-WH1210, *TRUPACT-III Processing*

WP 05-WH1710, *72-B RH Processing*

MTO404935-5, *WIPP Emplacement Tracking Software Technical Support*

Attachment 1 – Special Requirements for Additional MgO

The purpose of this attachment is to show the flow of shipment, receipt, processing, and emplacement of waste containers, MgO, and additional requirements for adding additional MgO.

Process:

1. When the shipment is approved for shipment from generator site, the WWIS Data Administrator will send approval e-mail per WP 08-NT.01.

2. When the WHE receives the approval e-mail, the WHE will print out a Shipment Summary Report per WP 08-NT.01.

3. When the shipment arrives at WIPP, the TE will send an e-mail for shipment release for processing per WP 08-NT3020.

4. The WHE will enter the shipment receipt date in the shipment receipt form in the WWIS per WP 08-NT.01.

5. Processing of released shipments will be per WP 05-WH1011.

6. Emplacement of processed containers will be per WP 05-WH1025.

7. If there are no drums or SWBs for topping the columns, dunnage will be emplaced to finish columns.

8. MgO will be emplaced on completed stacks per WP 05-WH1025.

9. At the end of shift, the emplaced waste and MgO data will be entered into the WWIS in the Emplace containers underground form per WP 05-WH1025.

10. Run MgO excess factor will be determined as follows:

    10.1. If the room excess Factor is >1.2, activities will continue for emplacement of waste and MgO.

    10.2. If the room excess Factor is <1.2, the WHM must be notified as per WP 05-WH1011.

11. WHM will evaluate the following conditions:

    - Current emplacement location and remaining volume in disposal room.

    - Near future Waste Receipts including which generator sites will be shipping to WIPP and at what rates.

    - Number of additional supersacks currently required.

Attachment 1 – Special Requirements for Additional MgO

12. The WHM will decide to initiate the emplacement of additional MgO based on the responses to the above items. The emplacement of additional MgO will be planned for future shifts. When emplacing additional MgO, place in equal geometric configuration to the waste.

13. Once the emplacement activities are complete, the data will be uploaded to the WWIS and the excess Factor will again be calculated. Additional MgO emplacement activities may resume.

References:

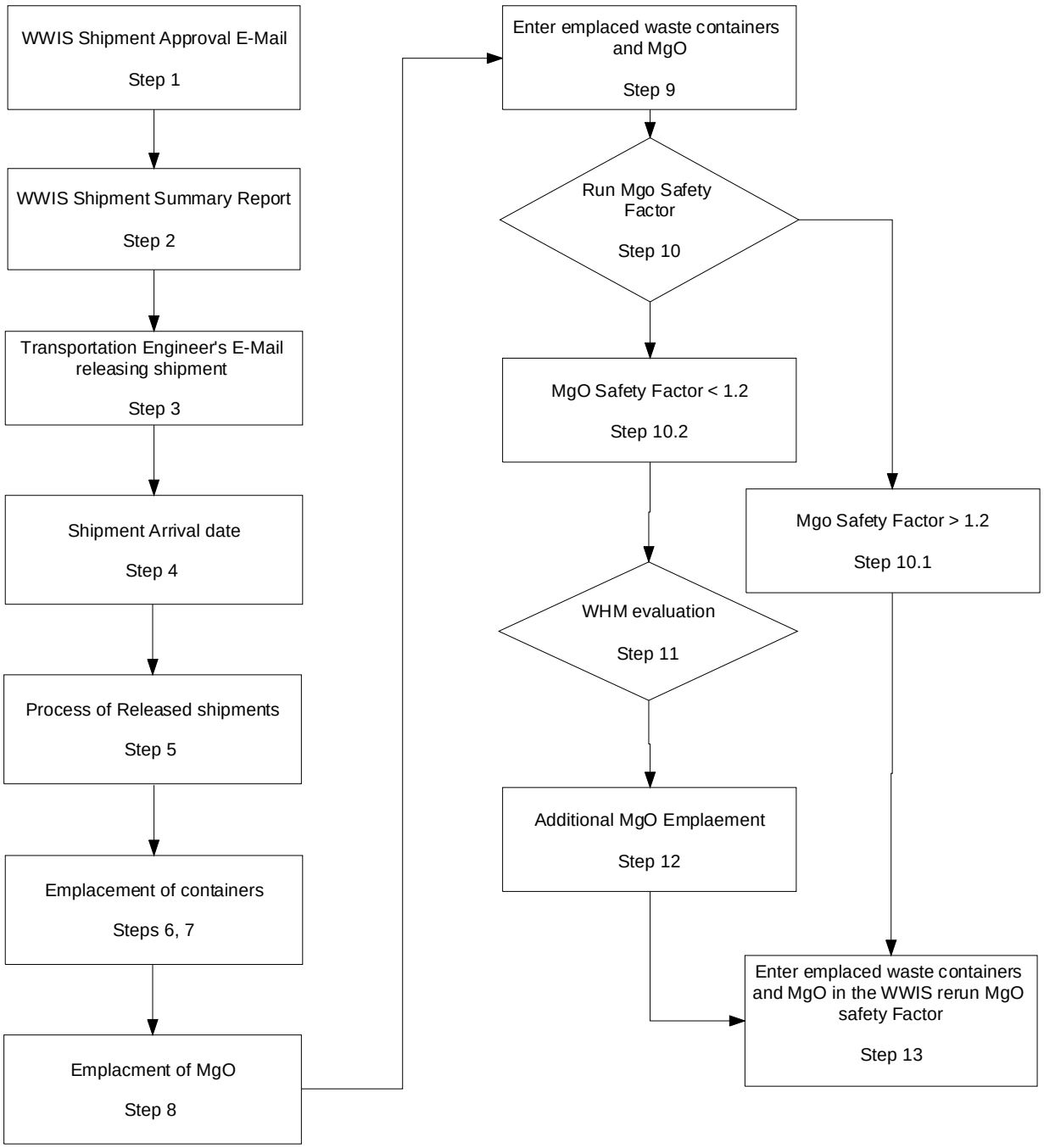
WP 05-WH1011, *CH Waste Processing*

WP 05-WH1025, *CH Downloading and Emplacement*

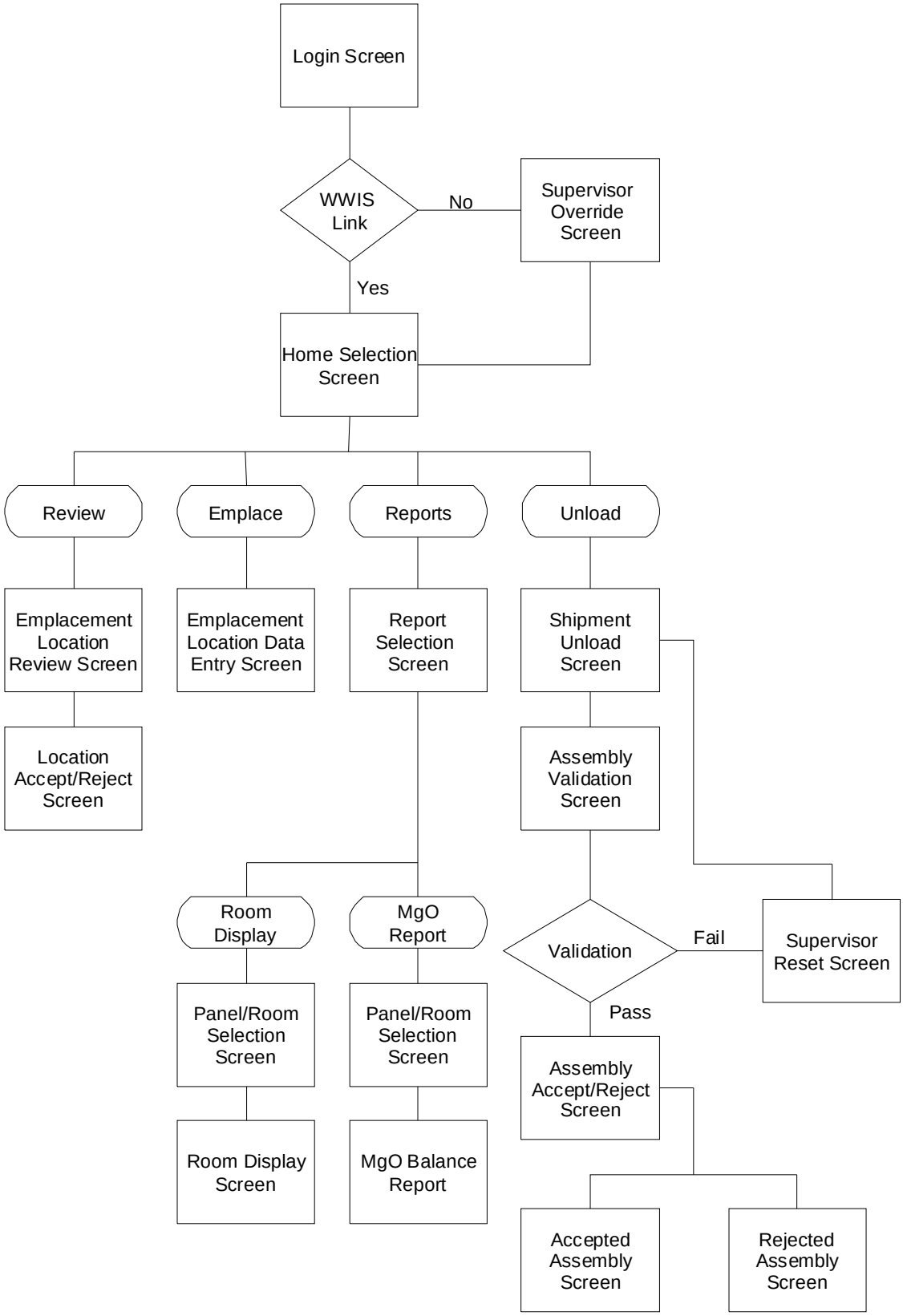
WP 08-NT.01, *WIPP Waste Information System Program and Data Management Plan*

WP 08-NT3020, *TRU Waste Receipt*

Attachment 1 – Special Requirements for Additional MgO



Attachment 2 – Flow Diagram of the Menu Structure



Attachment 3 – Site IDs and Locations

Site ID	Location
AE	Argonne National Laboratory - East
BC	Battelle - Columbus
BN	Advance Mixed Waste Treatment Facility - Idaho
C1	CCP at Savannah River Site - CH Waste
C2	CCP at Argonne National Laboratory - East
C3	CCP at Nevada Test Site
C4	CCP at Los Alamos National Laboratory
C5	CCP at Lawrence Livermore National Laboratory
C6	CCP at Oak Ridge National Laboratory - CH Waste
C7	CCP at Oak Ridge National Laboratory - RH Waste
C8	CCP at Idaho National Laboratory
C9	CCP at Idaho National Laboratory - RH Waste
CA	CCP at Los Alamos National Laboratory - RH Waste
CB	CCP at Savannah River Site - RH Waste
CC	CCP at Vallecito - RH Waste
IN	Idaho National Laboratory
LA	Los Alamos National Laboratory
MD	Mound Site
NT	Nevada Test Site
OR	Oak Ridge National Laboratory
RL	Hanford Site
SR	Savannah River Site
WI	Waste Isolation Pilot Plant